

Cell Line	Cell Type	Source	Citation
3T3-L1	Embryo	Swiss Mouse	Mizuarai, S., Miki, S., Araki, H., Takahashi, K. and Kotani, H. (2005) Identification of Dicarboxylate Carrier Slc25a10 as Malate Transporter in de Novo Fatty Acid Synthesis. <i>J. Biol. Chem.</i> 280(37): p. 32434-32441.
A549	Lung Carcinoma	Human	Stepulak, A., Sifringer, M., Rzeski, W., Endesfelder, S., Gratopp, A., Pohl, E.E., Bittigau, P., Hansen, H.H., Stryjecka-Zimmer, M., Turski, L. and Ikonomidou, C. (2005) NMDA antagonist inhibits the extracellular signal-regulated kinase pathway and suppresses cancer growth. <i>Proc. Natl. Acad. Sci.</i> 102: 15605 - 15610.
A549	Lung Carcinoma	Human	Ito, K., Yamamura, S., Essilfie-Quaye, S., Cosio, B., Ito, M., Barnes, P.J. and Adcock, I.M. (2006) Histone deacetylase 2-mediated deacetylation of the glucocorticoid receptor enables NF κ B suppression. <i>J. Exp. Med.</i> 203(1): 7-13.
A7	Melanoma	Human	Scott, M.G.H., Pierotti, V., Storez, H., Lindberg, E., Thuret, A., Muntaner, O., Labbe-Jullie, C., Pitcher, J.A. and Marullo, S. (2006) Cooperative Regulation of Extracellular Signal-Regulated Kinase Activation and Cell Shape Change by Filamin A and β -Arrestins. <i>Mol. & Cell Biol.</i> 26: 3432-3445.
AGS	Gastric Epithelium	Human	Varro, A., Noble, P-J. M., Pritchard, D.M., Kennedy, S., Hart, C.A., Dimaline, R. and Dockray, G.J. (2004) Helicobacter pylori Induces Plasminogen Activator Inhibitor 2 in Gastric Epithelial Cells through Nuclear Factor- κ B and RhoA: Implications for Invasion and Apoptosis <i>Cancer Res.</i> 64: 1695 - 1702.
AGS	Gastric Epithelium	Human	Nagasako, T., Sugiyama, T., Mizushima, T., Miura, Y., Kato, M. and Asaka, M. (2003) Up-regulated Smad5 Mediates Apoptosis of Gastric Epithelial Cells Induced by Helicobacter pylori Infection. <i>J. Biol. Chem.</i> : 278: 4821 - 4825.
ASM Transformed	Airway Smooth Muscle Cells	Human	Tran, T., Ens-Blackie, K., Rector, E.S., Stelmack, G.L., McNeill, K.D., Tarone, G., Gerthoffer, W.T., Unruh, H. and Halayko, A.J. (2007) Laminin-binding Integrin α 7 is Required for Contractile Phenotype Expression by Human Airway Myocyte. <i>Am. J. Respir. Cell Mol. Biol.</i> 37(6): 668-80.

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B16-F1	Melanoma	Mouse	Hotulainen, P., Paunola, E., Vartiainen, M.K. and Lappalainen, P. (2005) Actin-depolymerizing Factor and Cofilin-1 Play Overlapping Roles in Promoting Rapid F-Actin Depolymerization in Mammalian Nonmuscle Cells. <i>Mol. Biol. Cell.</i> 16(2): p. 649-664.
B16-F1	Melanoma	Mouse	Bertling, E., Hotulainen, P., Mattila, P.K., Matilainen, T., Salminen, M., and Lappalainen, P. (2004) Cyclase-associated-protein 1 (CAP1) promotes cofilin-induced actin dynamics in mammalian nonmuscle cells. <i>Mol. Biol. Cell</i> 15 (5): p. 2324-2334.
BEL7404	Hepatoma	Human	Liang, X-J, Finkel, T., Shen, D-W, Yin, J-J, Aszalos, A. and Gottesman, M.M. (2008) SIRT1 Contributes in Part to Cisplatin Resistance in Cancer Cells by Altering Mitochondrial Metabolism. <i>Mol Cancer Res</i> 6(9): 1499-506.
Bronchial	Smooth Muscle	Human	Nunes, R.O., Schmidt, M., Dueck, G., Baarsma, H., Halayko, A.J., Kerstjens, H.A.M., Meurs, H. and Gosens, R. (2008) GSK-3/?-catenin signaling axis in airway smooth muscle: role in mitogenic signaling <i>Am J Physiol Lung Cell Mol Physiol.</i> 294: L1110 - L1118.
C166	Yolk Sack Endothelium	Mouse	Zhou, X., Stuart, A., Dettin, L.E., Rodriguez, G., Hoel, B. and Gallicano G.I. (2004) Desmoplakin is required for microvascular tube formation in culture. <i>J. Cell Sci.</i> 117: 3129-3140.
C2C12	Myoblast	Mouse	Evangelisti, C., Tazzari, P.L., Riccio, M., Fiume, R., Hozumi, Y., Fala, F., Goto, K., Manzoli, L., Cocco, L. and Martelli, A.M. (2007) Nuclear diacylglycerol kinase-? is a negative regulator of cell cycle progression in C2C12 mouse myoblasts. <i>FASEB J.</i> 21: 3297 - 3307
C6R	Glioma	Rat	Saarikangas, J., Hakanen, J., Mattila, P.K., Grumet, M., Salminen, M. and Lappalainen, P. (2008) ABBA regulates plasma-membrane and actin dynamics to promote radial glia extension. <i>J Cell Sci.</i> 121(Pt 9):1444-54.
CHO-K1	Ovary	Chinese Hamster	Kheifets, V., Bright, R., Inagaki, K., Schechtman, D. and Mochly-Rosen, D. (2006) Protein Kinase C ? PKC-Annexin V Interaction: a required step in ? PKC translocation and function. <i>J. Biol. Chem.</i> 281(32): p. 23218-23226.

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DC2.4	Bone Marrow	Mouse	Jing, H., Yen, J-H and Ganea, D. (2004) A novel signaling pathway mediates the inhibition of CCL3/4 expression by PGE2. <i>J. Biol. Chem.</i> 279(53): p. 55176-55186.
DC2.4	Bone Marrow	Mouse	Zou, L., Zhou, J., Zhang, J., Li, J., Liu, N., Chai, L., Li, N., Liu, T., Li, L., Xie, Z., Liu, H., Wan, Y. and Wu, Y. (2009) The GTPase Rab3b/3c-positive recycling vesicles are involved in cross-presentation in dendritic cells. <i>Proc Natl Acad Sci U S A</i> 106(37): 15801-15806.
GS-KB-3-1	Epidermoid Adenocarcinoma	Human	Liang, X-J, Finkel, T., Shen, D-W, Yin, J-J, Aszalos, A. and Gottesman, M.M. (2008) SIRT1 Contributes in Part to Cisplatin Resistance in Cancer Cells by Altering Mitochondrial Metabolism. <i>Mol Cancer Res</i> 6(9): 1499-506.
H22	Hepatoma	Mouse	Huang, B., Lei, Z., Zhang, G-M, Li, D., Song, C., Li, B., Liu, Y., Yuan, Y., Unkeless, J., Xiong, H. and Feng, Z-H (2008) SCF-mediated mast cell infiltration and activation exacerbate the inflammation and immunosuppression in tumor microenvironment. <i>Blood</i> 112(4): 1269-79.
H22	Hepatocarcinoma	Mouse	Huang, B., Lei, Z., Zhang, G., Li, D., Song, C., Li, B., Liu, Y., Yuan, Y., Unkeless, J., Xiong, H. and Feng, Z. (2008) SCF-mediated mast cell infiltration and activation exacerbate the inflammation and immunosuppression in tumor microenvironment. <i>Blood</i> . 112(4): 1269-1279.
H22	Hepatoma	Mouse	Huang, B., Zhao, J., Shen, S., Li, H., He, K-L, Shen, G-X, Mayer, L., Unkeless, J., Li, D., Yuan, Y., Zhang, G.-M., Xiong, H. and Feng, Z.-H. (2007) <i>Listeria monocytogenes</i> Promotes Tumor Growth via Tumor Cell Toll-Like Receptor 2 Signaling. <i>Cancer Res.</i> 67(9): p. 4346-4352.
H441	Lung Adenocarcinoma	Human	Zhang, Y-A., Nemunaitis, J., Samuel, S.K., Chen, P., Shen, Y. and Tong, A.W. (2006) Antitumor Activity of an Oncolytic Adenovirus-Delivered Oncogene Small Interfering RNA. <i>Cancer Res.</i> 66(19): 9736-9743.
H460	Lung Cancer	Human	Ren, J., Shi, M., Liu, R., Yang, Q-H., Johnson, T., Skarnes, W.C. and Du, C. (2005) The <i>Birc6</i> (Bruce) gene regulates p53 and the mitochondrial pathway of embryonic development. <i>Proc. Natl. Acad. Sci. USA.</i> 102(3): p. 565-570.

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H9c2	Myoblast	Rat	Saotome, M., Safiulina, D., Szabadkai, G., Das, S., Fransson, A., Aspenstrom, P., Rizzuto, R. and Hajnoczky, G. (2008) Bidirectional Ca ²⁺ -dependent control of mitochondrial dynamics by the Miro GTPase. <i>Proc Natl Acad Sci U S A</i> 105(52): p. 20728.
hCMEC/D3	Brain Microvascular Endothelia	Human	Huang, W., Eum, S.Y., Andras, I.E., Hennig, B. and Toborek, M. (2009) PPAR{alpha} and PPAR{gamma} attenuate HIV-induced dysregulation of tight junction proteins by modulations of matrix metalloproteinase and proteasome activities <i>FASEB J.</i> 23(5): 1596-1606.
hCMEC/D3	brain endothelial cells	Human	Huang, W., Rha, G.B., Chen, L., Seelbach, M.J., Zhang, B., Andras, I.E., Bruemmer, D., Hennig, B. and Toborek, M. (2010) Inhibition of Telomerase Activity Alters Tight Junction Protein Expression and Induces Transendothelial Migration of HIV-1-Infected Cells. <i>Am J Physiol Heart Circ Physiol.</i> 298(4): H1136-H1145.
HCP40	Colon adenocarcinoma	null	Yao, K., Shida, S., Selvakumaran, M., Zimmerman, R., Simon, E., Schick, J., Haas, N.B., Balke, M., Ross, H., Johnson, S.W. and O'Dwyer, P.J. (2005) Macrophage Migration Inhibitory Factor Is a Determinant of Hypoxia-Induced Apoptosis in Colon Cancer Cell Lines. <i>Clin Cancer Res.</i> 11 (20): 7264 - 7272.
HCT-116	Colon Adenocarcinoma	Human	Yao, K., Shida, S., Selvakumaran, M., Zimmerman, R., Simon, E., Schick, J., Haas, N.B. Balke, M., Ross, H., Johnson, S.W. and O'Dwyer, P.J. (2005) Macrophage Migration Inhibitory Factor Is a Determinant of Hypoxia-Induced Apoptosis in Colon Cancer Cell Lines. <i>Clin. Can. Res.</i> 11: 7264-7272.
HCT-116	Colon Carcinoma	Human	Wang, J., Rajput, A., Kan, J.L.C., Rose, R., Liu, X., Kuropatwinski, K., Hauser, J., Beko, A., Dominquez, I., Sharratt, E.A., Brattain, L., LeVea, C., Sun, F., Keane, D.M., Gibson, N.W. and Michael G. Brattain (2009) Knockdown of Ron kinase inhibits mutant PI3 kinase and reduces metastasis in human colon carcinoma. <i>J. Biol. Chem.</i> 284 (16) 10912-10922.
HEK 293	Embryonic Kidney	Human	Khundmiri, S.J., Dean, W.L., McLeish, K.R. and Lederer, E.D. (2005) Parathyroid Hormone-mediated Regulation of Na ⁺ -K ⁺ -ATPase Requires

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			ERK-dependent Translocation of Protein Kinase C α . J. Biol. Chem. 280(10): p. 8705-8713.
HEK 293	Embryonic Kidney	Human	Kim, J., Ahn, S., Ren, X-R., Whalen, E.J., Reiter, E., Wei, H. and Lefkowitz, R.J. (2005) Functional antagonism of different G protein-coupled receptor kinases for β -arrestin-mediated angiotensin II receptor signaling. Proc. Natl. Acad. Sci. 102: 1442 - 1447.
HEK 293	Embryonic Kidney	Human	Ren, X-R., Reiter, E., Ahn, S., Kim, J., Chen, W. and Lefkowitz, R.J. (2005) Different G protein-coupled receptor kinases govern G protein and β -arrestin-mediated signaling of V2 vasopressin receptor. Proc. Natl. Acad. Sci. 102: 1448 - 1453.
HEK 293	Embryonic Kidney	Human	Wu, J-H, Goswami, R., Kim, L.K., Miller, W.E., Peppel, K. and Freedman, N.J. (2005) The Platelet-derived Growth Factor Receptor- β Phosphorylates and Activates G Protein-coupled Receptor Kinase-2: a Mechanism for Feedback Inhibition. J. Biol. Chem. 280(35): p. 31027-31035.
HEK 293	Embryonic Kidney	Human	Wei, H., Ahn, S., Shenoy, S.K., Karnik, S.S., Hunyady, L., Luttrell, L.M. and Lefkowitz, R.J. (2003) Independent -arrestin 2 and G protein-mediated pathways for angiotensin II activation of extracellular signal-regulated kinases 1 and 2. Proc. Natl. Acad. Sci. 100: 10782 - 10787.
HEK 293	Embryonic Kidney	Human	Ahn, S., Nelson, C.D., Garrison, T.R., Miller, W.E. and Lefkowitz, R.J. (2003) Desensitization, internalization, and signaling functions of -arrestins demonstrated by RNA interference. Proc. Natl. Acad. Sci. 100: 1740 - 1744.
HEK 293	Embryonic Kidney	Human	Liang, Y., Yu, W., Li, Y., Yan, X., Huang, Q. and Zhu, X. (2004) Nudel functions in membrane traffic mainly through association with Lis1 and cytoplasmic dynein. J. Cell Biol. 164 (4): 557-566.
HEK 293	Embryonic Kidney	Human	Kohout, T.A., Nicholas, S.L., Perry, S.J., Reinhart, G., Junger, S. and Struthers, R. (2004) Differential Desensitization, Receptor Phosphorylation, β -Arrestin Recruitment, and ERK1/2 Activation by the Two Endogenous Ligands for the CC Chemokine Receptor 7. J. Biol. Chem. 279 (22): p. 23214-23222.

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HEK 293	Embryonic Kidney	Human	Wei, H., Ahn, S., Barnes, W.G. and Lefkowitz, R.J., (2004) Stable interaction between beta -arrestin2 and AT 1A receptor is required for beta -arrestin2 mediated activation of extracellular signal-regulated kinase 1 and 2. <i>J. Biol. Chem.</i> 279: 48255-48261.
HEK 293	Embryonic Kidney	Human	Shikama, Y., Yamada, M., Miyashita, T. (2004) Caspase-8 and caspase-10 activate NF-B through RIP, NIK and IKK kinases. <i>Eur. J. Immun.</i> 33 (7): 1998-2006.
HEK 293	Embryonic Kidney	Human	Ahn, S., Shenoy, S.K., Wei, H. and Lefkowitz, R.J. (2004) Differential Kinetic and Spatial Patterns of {beta}-Arrestin and G Protein-mediated ERK Activation by the Angiotensin II Receptor. <i>J. Biol. Chem.</i> 279 (34): 35518-35525.
HEK 293	Embryonic Kidney	Human	Ahn, S., Wei, H., Garrison, T.R. and Lefkowitz, R.J. (2004) Reciprocal Regulation of Angiotensin Receptor-activated Extracellular Signal-regulated Kinases by (beta)-Arrestins 1 and 2. <i>J. Biol. Chem.</i> 279: 7807-7811.
HEK 293	Embryonic Kidney	Human	Shenoy, S.K., Drake, M.T., Nelson, C.D., Houtz, D.A., Xiao, K., Madabushi, S., Reiter, E., Premont, R.T., Lichtarge, O. and Lefkowitz, R.J. (2006) {beta}-Arrestin-dependent, G Protein-independent ERK1/2 Activation by the {beta}2 Adrenergic Receptor. <i>J. Biol. Chem.</i> 281(2): 1261-1273.
HEK 293T	Embryonic Kidney	Human	Wei, H., Ahn, S., Shenoy, S.K., Karnik, S.S., Hunyady, L., Luttrell, L.M. and Lefkowitz, R.J. (2003) Independent -arrestin 2 and G protein-mediated pathways for angiotensin II activation of extracellular signal-regulated kinases 1 and 2. <i>Proc. Natl. Acad. Sci.</i> 100: 10782 - 10787.
HEK-293	Embryonic Kidney	Human	Gesty-Palmer, D., Chen, M., Reiter, E., Ahn, S., Nelson, C.D., Wang, S., Eckhardt, A.E., Cowan, C.L., Spurney, R.F., Luttrell, L.M. and Lefkowitz, R.J. (2006) Distinct beta-Arrestin- and G Protein-dependent Pathways for Parathyroid Hormone Receptor-stimulated ERK1/2 Activation. <i>J. Biol. Chem.</i> 281(16): 10856-10864.
HEK-293	Embryonic Kidney	Human	Violin, J.D., DeWire, S.M., Barnes, W.G. and Lefkowitz, R.J. (2006) G Protein-Coupled Receptor Kinase and b-arrestin mediated desensitization of the angiotensin II type 1A receptor

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			elucidated by diacylglycerol dynamics. J. Biol. Chem. 281: 36411 - 36419.
HEK-293	Embryonic Kidney	Human	Violin, J.D., DeWire, S.M., Barnes, W.G. and Lefkowitz, R.J. (2006) G Protein-coupled Receptor Kinase and beta-Arrestin-mediated Desensitization of the Angiotensin II Type 1A Receptor Elucidated by Diacylglycerol Dynamics. J. Biol. Chem. 281(47): p. 36411-36419.
HEK-293	Embryonic Fibroblast	Human	Barthet, G., Framery, B., Gaven, F., Pellissier, L., Reiter, E., Claeysen, S., Bockaert, J. and Dumuis, A. (2007) 5-Hydroxytryptamine 4 Receptor Activation of the Extracellular Signal-regulated Kinase Pathway Depends on Src Activation but Not on G Protein or beta-Arrestin Signaling. Mol. Biol. Cell. 18(6): 1979-1991.
HEK-293	Embryonic Kidney	Human	El-Shewy, H.M., Lee, M-H., Obeid, L.M., Jaffa, A.A. and Luttrell, L.M. (2007) The Insulin-like Growth Factor Type 1 and Insulin-like Growth Factor Type 2/Mannose-6-phosphate Receptors Independently Regulate ERK1/2 Activity in HEK293 Cells. J. Biol. Chem. 282(36): 26150-26157.
HEK-293	Embryonic Kidney	Human	Noma, T., Lemaire, A., Prasad, S.V.N., Barki-Harrington, L., Tilley, D.G., Chen, J., Le Corvoisier, P., Violin, J.D., Wei, H., Lefkowitz, R.J. and Rockman, H.A. (2007) beta-Arrestin mediated (beta)1-adrenergic receptor transactivation of the EGFR confers cardioprotection. J. Clin. Invest. 117(9): p. 2445-2458.
HEK-293	Embryonic Kidney	Human	Kani, S., Nakayama, E., Yoda, A., Onishi, N., Sougawa, N., Hazaka, Y., Umeda, T., Takeda, K., Ichijo, H., Hamada, Y. and Minami, Y. (2007) Chk2 kinase is required for methylglyoxal-induced G2/M cell-cycle checkpoint arrest: implication of cell-cycle checkpoint regulation in diabetic oxidative stress signaling. Genes Cells. 12(8): 919-928.
HEK-293	Embryonic Kidney	Human	Kani, S., Nakayama, E., Yoda, A., Onishi, N., Sougawa, N., Hazaka, Y., Umeda, T., Takeda, K., Ichijo, H., Hamada, Y. and Minami, Y. (2007) Chk2 kinase is required for methylglyoxal-induced G2/M cell-cycle checkpoint arrest: implication of cell-cycle checkpoint regulation in diabetic

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			oxidative stress signaling. <i>Genes Cells</i> . 12(8): 919-928.
HEK-293	Embryonic Kidney	Human	El-Shewy, H.M., Johnson, K.R., Lee, M-H, Jaffa, A.A., Obeid, L.M. and Luttrell, L.M. (2006) Insulin-like Growth Factors Mediate Heterotrimeric G Protein-dependent ERK1/2 Activation by Transactivating Sphingosine 1-Phosphate Receptors . <i>J. Biol. Chem</i> . 281(42): 31399-31407.
HEK-293	Embryonic Kidney	Human	Rajagopal, K., Whalen, E.J., Violin, J.D., Stiber, J.A., Rosenberg, P.B., Premont, R.T., Coffman, T.M., Rockman, H.A. and Lefkowitz, R.J. (2006) beta-Arrestin2-mediated inotropic effects of the angiotensin II type 1A receptor in isolated cardiac myocytes. <i>PNAS</i> . 103: 16284 - 16289.
HEK-293	Embryonic Kidney	Human	Kara, E., Crepieux, P., Gauthier, C., Martinat, N., Piketty, V., Guillou, F., and Reiter, E. (2006) A Phosphorylation Cluster of Five Serine and Threonine Residues in the C-Terminus of the Follicle-Stimulating Hormone Receptor Is Important for Desensitization But Not for beta-Arrestin-Mediated ERK Activation. <i>Mol. Endocrinol</i> . 20(11): p. 3014-3026.
HEK-293	Embryonic Kidney	Human	Nelson, C.D., Kovacs, J.J., Nobles, K.N., Whalen, E.J. and Lefkowitz, R.J. (2008) beta-Arrestin Scaffolding of Phosphatidylinositol 4-Phosphate 5-Kinase I? Promotes Agonist-stimulated Sequestration of the {beta}2-Adrenergic Receptor. <i>J. Biol. Chem</i> . 283(30): p. 21093-21101.
HEK-293	Embryonic Kidney	Human	IM Kim, DG Tilley, J Chen, NC Salazar, EJ Whalen, JD Violin, and HA Rockman (2008) Beta-blockers alprenolol and carvedilol stimulate beta-arrestin-mediated EGFR transactivation. <i>Proc Natl Acad Sci</i> 105(38): 14555-60.
HEK-293	Embryonic Kidney	Human	Ahn, S., Kim, J., Hara, M.R., Ren, X. and Lefkowitz, R.J. (2009) beta-arrestin2 mediates anti-apoptotic signaling through regulation of bad phosphorylation. <i>J Biol Chem</i> 284(13): 8855-65.
HEK-293	Embryonic Kidney	Human	Shenoy, S.K., Modi, A.S., Shukla, A.K., Xiao, K., Berthouze, M., Ahn, S., Wilkinson, K.D., Miller, W.E. and Lefkowitz, R.J. (2009) {beta}-Arrestin-dependent signaling and trafficking of 7-transmembrane receptors is reciprocally

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			regulated by the deubiquitinase USP33 and the E3 ligase Mdm2. PNAS. 106(16): 6650-6655.
HEK-293	Embryonic Kidney	Human	Shenoy, S.K., Xiao, K., Venkataramanan, V., Snyder, P.M., Freedman, N.J. and Weissman, A.M. (2008) NEDD4 mediates agonist-dependent ubiquitination, lysosomal targeting and degradation of the beta 2 adrenergic receptor. J. Biol. Chem. 283: 22166 - 22176.
HEK-293	Embryonic Kidney	Human	Wehbi, V., Tranchant, T., Durand, G., Musnier, A., Decourtye, J., Piketty, V., Butnev, V.Y., Bousfield, G.R., Crepieux, P., Maurel, M-C. and Reiter, E. (2010) Partially Deglycosylated Equine LH Preferentially Activates {beta}-Arrestin-Dependent Signaling at the Follicle-Stimulating Hormone Receptor. Mol. Endocrinol. 24(3): 561-573.
HEK-293	Embryonic Kidney	Human	Takagi, S., Nakajima, M., Kida, K., Yamaura, Y., Fukami, T. and Yokoi, T. (2010) MicroRNAs Regulate Human Hepatocyte Nuclear Factor 4{alpha}, Modulating the Expression of Metabolic Enzymes and Cell Cycle. J. Biol. Chem. 285(7): 4415-4422.
HEK-293	Embryonic Kidney	Human	Zidar, D.A., Violin, J.D., Whalen, E.J. and Lefkowitz, R.J. (2009) Selective engagement of G protein coupled receptor kinases (GRKs) encodes distinct functions of biased ligands. PNAS. 106(24): 9649-9654.
HEK-293	Embryonic Kidney	Human	Wang, L., Gesty-Palmer, D., Fields, T.A. and Spurney, R.F. (2009) Inhibition of WNT Signaling by G Protein-Coupled Receptor (GPCR) Kinase 2 (GRK2). Mol. Endocrinol. 23(9): 1455-1465.
HEK-293	Embryonic Kidney	Human	Ahn, S., Kim, J., Hara, M.R., Ren, X.R. and Lefkowitz, R.J. (2009) {beta}-Arrestin-2 Mediates Anti-apoptotic Signaling through Regulation of BAD Phosphorylation. J. Biol. Chem. 284(13): 8855-8865.
HEK-293	Embryonic Kidney	Human	Chen, M., Philipp, M., Wang, J., Premont, R.T., Garrison, T.R., Caron, M.G., Lefkowitz, R.J. and Chen, W. (2009) G Protein-coupled Receptor Kinases Phosphorylate LRP6 in the Wnt Pathway. J. Biol. Chem. 284(50): 35040-35048.

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HeLa	Cervical Carcinoma	Human	Yang, Q-H, Church-Hajduk, R., Ren, J., Newton, M.L. and Du, C. (2003) Omi/HtrA2 catalytic cleavage of inhibitor of apoptosis (IAP) irreversibly inactivates IAPs and facilitates caspase activity in apoptosis. <i>Genes & Dev.</i> 17: 1487 - 1496.
HeLa	Cervical Carcinoma	Human	Wetherow, D.S., Garrison, T.R., Miller, W.E. and Robert J. Lefkowitz (2004) β -Arrestin inhibits NF- κ B activity by means of its interaction with the NF- κ B inhibitor I κ B α . <i>Proc. Natl. Acad. Sci. USA</i> 101: 8603-8607.
HeLa	Cervical Carcinoma	Human	Cassimeris, L. and Morabito, J. (2004) TOGp, the Human Homolog of XMAP215/Dis1, Is Required for Centrosome Integrity, Spindle Pole Organization, and Bipolar Spindle Assembly. <i>Mol. Biol. Cell</i> 15 (4): 1580-1590.
HeLa	Cervical Carcinoma	Human	Layzer, J.M., McCaffrey, A.P., Tanner, A.K., Huang, Zan, Kay, Mark A. and Sullenger, B.A. (2004) In vivo activity of nuclease-resistant siRNAs. <i>RNA</i> 10 (5): p. 766-771.
HeLa	Cervical Carcinoma	Human	Kheifets, V., Bright, R., Inagaki, K., Schechtman, D. and Mochly-Rosen, D. (2006) Protein Kinase C gamma(PKC)-Annexin V Interaction: a required step in ? PKC translocation and function. <i>J. Biol. Chem.</i> 281(32): p. 23218-23226.
HeLa	Cervical Carcinoma	Human	Shulga, N. and Pastorino, J.G. (2006) Acyl Coenzyme A-binding Protein Augments Bid-induced Mitochondrial Damage and Cell Death by Activating μ -Calpain. <i>J. Biol. Chem.</i> 281(41): 30824-30833.
HeLa	Cervical Carcinoma	Human	Chung, J-S., Sato, K., Dougherty, I.I., Cruz, Jr., P.D. and Ariizumi, K. (2007) DC-HIL is a negative regulator of T lymphocyte activation. <i>Blood.</i> 109(10): p. 4320-4327.
HeLa	Cervical Carcinoma	Human	Bentley, A.M., Normand, G., Hoyt, J. and King, R.W. (2007) Distinct Sequence Elements of Cyclin B1 Promote Localization to Chromatin, Centrosomes, and Kinetochores during Mitosis. <i>Mol. Biol. Cell</i> , Dec 2007; 18: 4847 - 4858.
HeLa	Cervical Carcinoma	Human	Zhu, S., Wang, W., Clarke, D.C. and Liu, X. (2007) <i>J. Biol Chem.</i> 282 (25) 18327-18338.

Cell Line	Cell Type	Source	Citation
HeLa	Cervical Carcinoma	Human	Pomerening, J.R., Ubersax, J.A. and Ferrell, J.E., Jr. (2008) Rapid Cycling and Precocious Termination of G1 Phase in Cells Expressing CDK1AF. <i>Mol. Biol. Cell</i> , 19: 3426 - 3441.
HepG2	Hepatocellular Carcinoma	Human	Pastorino, J.G. and Shulga, N. (2008) TNFalpha can provoke cleavage and activation of sterol regulatory element binding protein in ethanol exposed cells via a caspase dependent pathway that is cholesterol-insensitive. <i>J. Biol. Chem.</i> 283: 25638 - 25649.
HL-60	Peripheral Blood Promyelocytic Leukemia	Human	Smirnova, I.V., Kajstura, M., Sawamura, T. and Goligorsky, M.S. (2004) Asymmetric dimethylarginine upregulates LOX-1 in activated macrophages: role in foam cell formation. <i>AJP: Heart</i> 287(2): p. H782-H790
HMEC-1	Human Microvascular Endothelial Cells	Human	Zhou, X., Stuart, A., Dettin, L.E., Rodriguez, G., Hoel, B. and Gallicano G.I. (2004) Desmoplakin is required for microvascular tube formation in culture. <i>J. Cell Sci.</i> 117: 3129-3140.
HPAEC	Pulmonary Artery Endothelium	Human	Berdyshev, E.V., Gorshkova, I., Skobeleva, A., Bittman, R., Lu, X., Dudek, S.M., Mirzapoiazova, T., Garcia, J.G.N. and Natarajan, V. (2009) FTY720 inhibits ceramide synthases and upregulates dihydrosphingosine-1-phosphate formation in human lung endothelial cells. <i>JBC</i> 284 (9): 5467.
HT29	Colon Adenocarcinoma	Human	Yao, K., Shida, S., Selvakumaran, M., Zimmerman, R., Simon, E., Schick, J., Haas, N.B. Balke, M., Ross, H., Johnson, S.W. and O'Dwyer, P.J. (2005) Macrophage Migration Inhibitory Factor Is a Determinant of Hypoxia-Induced Apoptosis in Colon Cancer Cell Lines. <i>Clin. Can. Res.</i> 11: 7264-7272.
HT-29	Colon Adenocarcinoma	Human	Yao, K., Shida, S., Selvakumaran, M., Zimmerman, R., Simon, E., Schick, J., Haas, N.B., Balke, M., Ross, H., Johnson, S.W. and O'Dwyer, P.J. (2005) Macrophage Migration Inhibitory Factor Is a Determinant of Hypoxia-Induced Apoptosis in Colon Cancer Cell Lines. <i>Clin. Cancer Res.</i> 11(20): p. 7264-7272.
HUT-78	T Cells	Human	Maneechotesuwan, K., Xin, Y., Ito, K., Jazrawi, E., Lee, K-Y., Usmani, O.S., Barnes, P.J. and Adcock, I.M. (2007) Regulation of Th2 Cytokine Genes by p38 MAPK-Mediated Phosphorylation of GATA-3. <i>J. Immunol.</i> 178(4): 2491-2498.

Cell Line	Cell Type	Source	Citation
J774	Macrophage	Mouse	Osada, Y., Sunatani, T., Kim, I.S., Nakanishi, Y. and Shiratsuchi, A. (2009) Signalling Pathway Involving GULP, MAPK and Rac1 for SR-BI-Induced Phagocytosis of Apoptotic Cells. <i>J Biochem</i> 145(3): 387.
JAR	Choriocarcinoma	Human	Abboud-Jarrous, G., Atzmon, R., Peretz, T., Palermo, C., Gadea, B.B., Joyce, J.A. and Vlodaysky, I. (2008) Cathepsin L Is Responsible for Processing and Activation of Proheparanase through Multiple Cleavages of a Linker Segment. <i>J. Biol. Chem.</i> 283: 18167 - 18176.
Jurkat	T-Cell Lymphoma	Human	Nguyen, J.T. and Wells, J.A. (2003) Direct activation of the apoptosis machinery as a mechanism to target cancer cells. <i>Proc. Natl. Acad. Sci.</i> 100: 7533 - 7538.
KATOIII	Gastric Epithelium	Human	Nagasako, T., Sugiyama, T., Mizushima, T., Miura, Y., Kato, M. and Asaka, M. (2003) Up-regulated Smad5 Mediates Apoptosis of Gastric Epithelial Cells Induced by Helicobacter pylori Infection. <i>J. Biol. Chem.</i> 278: 4821 - 4825.
L/Stab-2	Fibroblast	Mouse	Park, S-Y., Kang, K-B., Thapa, N., Kim, S-Y., Lee, S-J. and Kim, I-S. (2008) Requirement of Adaptor Protein GULP during Stabilin-2-mediated Cell Corpse Engulfment. <i>J. Biol. Chem.</i> 283(16): 10593-10600.
LNCaP	Prostate Cancer	Human	Takayama, K., Tsutsumi, S., Suzuki, T., Horie-Inoue, K., Ikeda, K., Kaneshiro, K., Fujimura, T., Kumagai, J., Urano, T., Sakaki, Y., Shirahige, K., Sasano, H., Takahashi, S., Kitamura, T., Ouchi, Y., Aburatani, H. and Inoue, S. (2009) Amyloid precursor protein is a primary androgen target gene that promotes prostate cancer growth. <i>Cancer Res</i> 69(1): p. 137.
M2	Melanoma	Human	Scott, M.G.H., Pierotti, V., Storez, H., Lindberg, E., Thuret, A., Muntaner, O., Labbe-Jullie, C., Pitcher, J.A. and Marullo, S. (2006) Cooperative Regulation of Extracellular Signal-Regulated Kinase Activation and Cell Shape Change by Filamin A and β -Arrestins. <i>Mol. & Cell Biol</i> , 26: 3432-3445.
McA-RH 7777	Hepatoma	Rat	Pastorino, J.G. and Shulga, N. (2008) Tumor Necrosis Factor- α Can Provoke Cleavage and Activation of Sterol Regulatory Element-binding Protein in Ethanol-exposed Cells via a

Cell Line	Cell Type	Source	Citation
			Caspase-dependent Pathway That Is Cholesterol Insensitive. <i>J. Biol. Chem.</i> 283: 25638 - 25649.
MCF-7	Breast Adenocarcinoma	Human	Ikeda, K., Ogawa, S., Tsukui, T., Horie-Inoue, K., Ouchi, Y., Kato, S., Muramatsu, M. and Inoue, S. (2004) Protein Phosphatase 5 Is a Negative Regulator of Estrogen Receptor-mediated Transcription. <i>Mol. Endocrinol.</i> 18(5): 1131-1143.
MDA MB-231	Breast Cancer	Human	Ge, L., Shenoy, S.K., Lefkowitz, R.J. and DeFea, K.A. (2004) Constitutive protease-activated-receptor-2 mediated migration of MDA MB-231 breast cancer cells requires both beta-arrestin-1 and 2. <i>J. Biol. Chem.</i> 279(53): p. 55419-55424.
MDA MB-468	Breast Carcinoma	Human	Ge, L., Shenoy, S.K., Lefkowitz, R.J. and DeFea, K.A. (2004) Constitutive protease-activated-receptor-2 mediated migration of MDA MB-231 breast cancer cells requires both beta-arrestin-1 and 2. <i>J. Biol. Chem.</i> 279(53): p. 55419-55424.
MDA-MB-435	Melanoma	Human	Abboud-Jarrous, G., Atzmon, R., Peretz, T., Palermo, C., Gadea, B.B., Joyce, J.A. and Vlodaysky, I. (2008) Cathepsin L Is Responsible for Processing and Activation of Proheparanase through Multiple Cleavages of a Linker Segment. <i>J. Biol. Chem.</i> 283: 18167 - 18176.
MDA-MB-468	Breast Carcinoma	Human	Zoudilova, M., Kumar, P., Ge, L., Wang, P., Bokoch, G. M. and DeFea, K. A. (2007) beta-arrestin-dependent regulation of the cofilin pathway downstream of protease-activated receptor-2. <i>J. Biol. Chem.</i> 282: 20634.
MEF	Embryonic Fibroblast	Mouse	Pitto, L., Rizzo, M., Simili, M., Colligiani, D., Evangelista, M., Mercatanti, A., Mariani, L., Cremisi, F. and Rainaldi, G. (2009) MiR-290 acts as physiological effector of senescence in fibroblasts. <i>Physiol Genomics.</i> 39(3): 210-218.
MG63	Osteosarcoma	Human	Ichikawa, T., Horie-Inoue, K., Ikeda, K., Blumberg, B. and Inoue, S. (2007) Vitamin K2 induces phosphorylation of protein kinase A and expression of novel target genes in osteoblastic cells. <i>J Mol Endocrinol</i> 1 39 (4): 239.
MKN 28	Gastric Epithelium	Human	Nagasako, T., Sugiyama, T., Mizushima, T., Miura, Y., Kato, M. and Asaka, M. (2003) Up-regulated Smad5 Mediates Apoptosis of Gastric Epithelial Cells Induced by Helicobacter pylori Infection. <i>J. Biol. Chem.</i> : 278: 4821 - 4825.

Cell Line	Cell Type	Source	Citation
MKN 45	Gastric Epithelium	Human	Nagasako, T., Sugiyama, T., Mizushima, T., Miura, Y., Kato, M. and Asaka, M. (2003) Up-regulated Smad5 Mediates Apoptosis of Gastric Epithelial Cells Induced by Helicobacter pylori Infection. J. Biol. Chem.: 278: 4821 - 4825.
MV-4-11	Biophenotypic B Myelomonocytic Leukemia	Human	Yang, X., Liu, L., Sternberg, D., Tang, L., Galinsky, I., DeAngelo, D. and Stone, R. (2005) The FLT3 Internal Tandem Duplication Mutation Prevents Apoptosis in Interleukin-3-Deprived BaF3 Cells Due to Protein Kinase A and Ribosomal S6 Kinase 1-Mediated BAD Phosphorylation at Serine 112. Cancer Res. 65(16): p. 7338-7347.
N/A	N/A	N/A	Someya, A., Moss, J. and Nagaoka, I. (2006) Involvement of a guanine nucleotide-exchange protein, ARF-GEP100/BRAG2a, in the apoptotic cell death of monocytic phagocytes. J. Leukoc. Biol. 80(4): 915-921.
Neuro2a	Neuroblastoma	Mouse	Bertling, E., Hotulainen, P., Mattila, P.K., Matilainen, T., Salminen, M., and Lappalainen, P. (2004) Cyclase-associated-protein 1 (CAP1) promotes cofilin-induced actin dynamics in mammalian nonmuscle cells. Mol. Biol. Cell 15 (5): p. 2324-2334.
Neuro2a	Neuroblastoma	Mouse	Shi, F., Cheng, Y., Wang, X.L. and Edge, A.S.B. (2010) {beta}-Catenin Up-regulates Atoh1 Expression in Neural Progenitor Cells by Interaction with an Atoh1 3' Enhancer. J. Biol. Chem. 285(1): 392-400.
NIH-3T3	Fibroblast	Mouse	Hotulainen, P., Paunola, E., Vartiainen, M.K. and Lappalainen, P. (2005) Actin-depolymerizing Factor and Cofilin-1 Play Overlapping Roles in Promoting Rapid F-Actin Depolymerization in Mammalian Nonmuscle Cells. Mol. Biol. Cell. 16(2): p. 649-664.
NIH-3T3	Fibroblast	Mouse	Bertling, E., Hotulainen, P., Mattila, P.K., Matilainen, T., Salminen, M., and Lappalainen, P. (2004) Cyclase-associated-protein 1 (CAP1) promotes cofilin-induced actin dynamics in mammalian nonmuscle cells. Mol. Biol. Cell 15 (5): 2324-2334.
NIH-3T3	Fibroblast	Mouse	Nomachi, A., Nishita, M., Inaba, D., Enomoto, M., Hamasaki, M. and Minami, Y. (2008) Receptor Tyrosine Kinase Ror2 Mediates Wnt5a-induced Polarized Cell Migration by Activating c-Jun N-terminal Kinase via Actin-binding Protein

Cell Line	Cell Type	Source	Citation
			Filamin A. J. Biol. Chem. 283(41): 27973-27981.
OK	Kidney	Opossum	Khundmiri, S.J., Dean, W.L., McLeish, K.R. and Lederer, E.D. (2005) Parathyroid Hormone-mediated Regulation of Na ⁺ -K ⁺ -ATPase Requires ERK-dependent Translocation of Protein Kinase C{alpha}. J. Biol. Chem. 280(10): p. 8705-8713.
OK	Kidney	Opossum	Khundmiri, S.J., Ameen, M., Delamere, N.A. and Lederer, E.D. (2008) PTH-mediated regulation of Na ⁺ -K ⁺ -ATPase requires Src kinase-dependent ERK Phosphorylation. Am J Physiol Renal Physiol. 295(2): F426-F437.
PC-12	Pheochromocytoma	Rat	de Barry, J., Janoshazi, A., Luc Dupont, J., Procksch, O., Chasserot-Golaz, S., Jeromin, A. and Vitale, N. (2006) Functional Implication of Neuronal Calcium Sensor-1 and Phosphoinositol 4-Kinase-beta Interaction in Regulated Exocytosis of PC12 Cells. J. Biol Chem. 281(26): 18098-18111.
Primary	Pulmonary Artery Endothelium	Human	Birukova, A.A., Chatchavalvanich, S., Rios, A., Kawkitinarong, K., Garcia, J.G.N. and Birukov, K.G. (2006) Differential Regulation of Pulmonary Endothelial Monolayer Integrity by Varying Degrees of Cyclic Stretch. Am. J. Pathol. 168: 1749 - 1761.
Primary	Dorsal Root Ganglion	Rat	Hengst, U. Cox, L.J., Macosko, E.Z. and Jaffrey, S.R. (2006) Functional and Selective RNA Interference in Developing Axons and Growth Cones. J. Neurosci. 26(21): 5727-5732.
Primary	T-Cells (CD3+)	Human	Samten, B., Howard, S.T., Weis, S.E., Wu, S., Shams, H., Townsend, J.C., Safi, H. and Barnes, P.F. (2005) Cyclic AMP Response Element-Binding Protein Positively Regulates Production of IFN- γ by T Cells in Response to a Microbial Pathogen. J. Immunol. 174(10): p. 6357-6363.
Primary	Dorsal Root Ganglion	Rat	Wu, K.Y., Hengst, U., Cox, L.J., Macosko, E.Z., Jeromin, A., Urquhart, E.R., and Jaffrey, S.R. (2005) Local translation of RhoA regulates growth cone collapse. Nature 436: 1020-1024.
Primary	Macrophage	Human	Asmis, R., Wang, Y., Xu, L., Kisgati, M., Begley, J.G. and Mieyal, J.J. (2005) A novel thiol oxidation-based mechanism for adriamycin-induced cell injury in

Cell Line	Cell Type	Source	Citation
			human macrophages. FASEB J. published 13 September 2005, 10.1096/fj.04-2991fj.
Primary	Schwann Cells	Mouse	Higuchi, H., Yamashita, T., Yoshikawa, H. and Tohyama, M. (2003) Functional inhibition of the p75 receptor using a small interfering RNA. <i>Biochem. & Biophys. Res. Comm.</i> 301: 804-809.
Primary	Peritoneal Macrophage	Mouse	de Beer, M.C., Zhao, Z., Webb, N.R., van der Westhuyzen, D.R. and de Villiers, W.J.S. (2003) Lack of a direct role for macrosialin in oxidized LDL metabolism <i>J. Lipid Res.</i> 44: 674 - 685.
Primary	Osteoblast	Mouse	Ohyama, Y., Nifuji, A., Maeda, Y., Amagasa, T. and Noda, M. (2004) Spatiotemporal Association and Bone Morphogenetic Protein Regulation of Sclerostin and Osterix Expression during Embryonic Osteogenesis. <i>Endocrinology.</i> 145(10): p. 4685-4692.
Primary	Lung Microvascular Endothelial Cells	Human	Kolosova, I.A., Ma, S-F, Adyshev, D.M., Wang, P., Ohba, M., Natarajan, V., Garcia, J.G.N. and Verin, A.D. (2004) Role of CPI-17 in the regulation of endothelial cytoskeleton <i>AJP: Lung.</i> 287(5): L970.
Primary	Dorsal Root Ganglion Neurons	Mouse	Haruhisa Higuchi, Toshihide Yamashita, Hideki Yoshikawa, and Masaya Tohyama (2003) Functional inhibition of the p75 receptor using a small interfering RNA. <i>Biochem. & Biophys. Res. Comm.</i> 301: 804-809.
Primary	Dendritic Cells	Mouse	Liu, G., Ng, H., Akasaki, Y., Yuan, X., Ehtesham, M., Yin, D., Black, K.L. and Yu, J.S. (2004) Small interference RNA modulation of IL-10 in human monocyte-derived dendritic cells enhances the Th1 response. <i>Eur. J. Immunol.</i> 34: 1680-1687.
Primary	Dendritic Cells	Mouse	Li, M., Qian, H., Ichim, T.E., Ge, W-W, Popov, I.A., Rycerz, K., Neu, J., White, D., Zhong, R., Min, W-P. (2004) Induction of RNA Interference in Dendritic Cells. <i>Immunologic Research</i> 30 (2) 215-230.
Primary	Cortical Neurons	Mouse	Aleyasin, H., Cregan, S.P., Iyirhiaro, G., OHare, M.J., Callaghan, S.M., Slack, R.S. and Park, D.S. (2004) Nuclear Factor-B Modulates the p53 Response in Neurons Exposed to DNA Damage. <i>J. Neurosci.</i> 24 (12): 2963-2973.

Cell Line	Cell Type	Source	Citation
Primary	Cortical Neurons	Mouse	Aarts, M., Lihara, K., Wei, W-L, Xiong, Z-G, Arundine, M., Cerwinski, W., MacDonald, J.F., Tymianski, M. (2003) A Key Role for TRPM7 Channels in Anoxic Neuronal Death. <i>Cell</i> 115: 863.
Primary	Cerebellar Neurons	Rat	Numakawa, T., Nakayama, H., Suzuki, S., Kubo, T., Nara, F., Numakawa, Y., Yokomaku, D., Araki, T., Ishimoto, T., Ogura, A. and Taguchi, T. (2003) Nerve growth factor-induced glutamate release is via p75 receptor, ceramide and Ca ²⁺ from ryanodine receptor in developing cerebellar neurons. <i>J. Biol. Chem.</i> 278: 41259-41269.
Primary	Cardiac Myocytes (Neonatal)	Rat	Juhaszova, M., Zorov, D.B., Kim, S-H, Pepe, S., Fu, O., Fishbein, K.W., Ziman, B.D., Wang, S., Ytrehus, K., Antos, C.L., Olson, E.N. and Sollott, S.J. (2004) Glycogen synthase kinase-3{beta} mediates convergence of protection signaling to inhibit the mitochondrial permeability transition pore. <i>J. Clin. Invest.</i> 113(11): p. 1535-1549.
Primary	Aveolar Type II Cells	Mouse	Ueno, T., Linder, S., Na, C-L, Rice, W.R., Johansson, J., and Weaver, T.E. (2004) Processing of Pulmonary Surfactant Protein B by Napsin and Cathepsin H. <i>J. Biol. Chem.</i> 279: 16178-16184.
Primary	Aortic Muscle Cells	Rat	Lake, A.C. & Castellot, J.J. (2003) CCN5 modulates the antiproliferative effect of heparin and regulates cell motility in vascular smooth muscle cells. <i>Cell Comm. & Signaling</i> 1: 5.
Primary	Bone Marrow	Mouse	Yang, R., Cai, Z., Zhang, Y., Yutzy IV, W.H., Roby, K.F. and Roden, R.B.S. (2006) CD80 in Immune Suppression by Mouse Ovarian Carcinoma-Associated Gr-1+CD11b+ Myeloid Cells. <i>Cancer Res</i> 66 (13): 6807 - 6815.
Primary	Macrophage	Mouse	Wang, Y., Chen, T., Han, C., He, D., Liu, H., An, H., Cai, Z. and Cao, X. (2007) Lysosome-associated small Rab GTPase Rab7b negatively regulates TLR4 signaling in macrophages by promoting lysosomal degradation of TLR4. <i>Blood</i> 110: 962 - 971.
Primary	Dendritic Cells	Mouse	Zheng, X., Koropatnick, J., Li, M., Zhang, X., Ling, F., Ren, X., Hao, X., Sun, H., Vladau, C., Franek, J.A., Feng, B., Urquhart, B.L., Zhong, R., Freeman, D.J., Garcia, B. and Min, W-P. (2006) Reinstalling Antitumor Immunity by Inhibiting Tumor-Derived Immunosuppressive Molecule IDO

Cell Line	Cell Type	Source	Citation
			through RNA Interference. <i>J. Immunol.</i> 177(8): 5639-5646.
Primary	Lacrimal Gland Acinar Cells	Rabbit	Xie, J., Chiang, L., Contreras, J., Wu, K., Garner, J.A., Medina-Kauwe, L. and Hamm-Alvarez, S.F. (2006) Novel Fiber-Dependent Entry Mechanism for Adenovirus Serotype 5 in Lacrimal Acini. <i>J. Virol.</i> 80(23): 11833 - 11851.
Primary	Dendritic Cells	Mouse	Li, M., Zhang, X., Zheng, X., Lian, D., Zhang, Z-X., Ge, W., Yang, J., Vladau, C., Suzuki, M., Chen, D., Zhong, R., Garcia, B., Jevnikar, A.M. and Min, W-P (2007) Immune Modulation and Tolerance Induction by RelB-Silenced Dendritic Cells through RNA Interference. <i>J. Immunol.</i> 178(9): p. 5480-5487.
Primary	Hippocampal Neurons	Rat	Amaral, M.D. and Pozzo-Miller, L. (2007) TRPC3 Channels Are Necessary for Brain-Derived Neurotrophic Factor to Activate a Nonselective Cationic Current and to Induce Dendritic Spine Formation. <i>J. Neurosci.</i> 27(19): p. 5179-5189.
Primary	Coronary Artery Endothelial	Human HCAEC	Dandapat, A., Hu, C., Sun, L. and Mehta, J.L. (2007) Small Concentrations of oxLDL Induce Capillary Tube Formation From Endothelial Cells via LOX-1 Dependent Redox-Sensitive Pathway. <i>Arterioscler Thromb Vasc Biol.</i>
Primary	Cortical Neurons	Mouse	Cui, H., Hayashi, A., Sun, H-S, Belmares, M.P., Cobey, C., Phan, T., Schweizer, J., Salter, M.W., Wang, Y.T., Tasker, R.A., Garman, D., Rabinowitz, J., Lu, P.S. and Tymianski, M. (2007) PDZ Protein Interactions Underlying NMDA Receptor-Mediated Excitotoxicity and Neuroprotection by PSD-95 Inhibitors. <i>J. Neurosci.</i> 27(37): 9901-9915.
Primary	Pulmonary Artery Endothelium	Human	Zhuwei Li, Xhevahire Hyseni, Jacqueline D. Carter, Joleen M. Soukup, Lisa A. Dailey, and Yuh-Chin T. Huang (2006) Pollutant particles enhanced H ₂ O ₂ production from NAD(P)H oxidase and mitochondria in human pulmonary artery endothelial cells. <i>Am J Physiol Cell Physiol</i> 291: C357 - C365.
Primary	Cortical Neurons	Mouse	Burkhalter, J., Fiumelli, H., Erickson, J.D. and Martin, J-L. (2007) A critical role for system a amino acid transport in the regulation of dendritic development by BDNF. <i>J Biol Chem</i> 282: 5152 - 5159.

Cell Line	Cell Type	Source	Citation
Primary	Dendritic Cells	Human	Smith, A.L., Ganesh, L., Leung, K., Jongstra-Bilen, J., Jongstra, J. and Nabel, G.J. (2007) Leukocyte-specific protein 1 interacts with DC-SIGN and mediates transport of HIV to the proteasome in dendritic cells. <i>J. Exp. Med.</i> 204(2): p. 421-430.
Primary	Cortical Neurons	Mouse	Supnet, C., Grant, J., Kong, H., Westaway, D. and Mayne, M. (2006) Amyloid beta-(1-42) Increases Ryanodine Receptor-3 Expression and Function in TgCRND8 Mice. <i>J. Biol. Chem.</i> 281: 38440 - 38447.
Primary	Dendritic Cells (Bone Marrow)	Mouse	Chung, J-S, Sato, K., Dougherty, I.I., Cruz, Jr., P.D. and Ariizumi, K. (2007) DC-HIL is a negative regulator of T lymphocyte activation. <i>Blood.</i> 109(10): p. 4320-4327.
Primary	Retinal Ganglion	Rat	Hayashi, H., Campenot, R.B., Vance, D.E. and Vance, J.E. (2007) Apolipoprotein E-Containing Lipoproteins Protect Neurons from Apoptosis via a Signaling Pathway Involving Low-Density Lipoprotein Receptor-Related Protein-1. <i>J. Neurosci.</i> 27(8): 1933-1941.
Primary	Cardiac Myocytes	Feline	Ramabadran, R. S., Chancey, A., Vallejo, J.G., Barger, P.M., Sivasubramanian, N. and Mann, D.L. (2008) Targeted Gene Silencing of Tumor Necrosis Factor Attenuates the Negative Inotropic Effects of Lipopolysaccharide in Isolated Contracting Cardiac Myocytes. <i>Tex Heart Inst J.</i> 35(1): 16-21.
Primary	Cardiac Fibroblast	Mouse	Hu, C., Dandapat, A., Sun, L., Khan, J.A., Liu, Y., Hermonat, P.L. and Mehta, J.L. (2008) Regulation of TGFbeta 1-mediated collagen formation by LOX-1: Studies based on forced over-expression of TGFbeta 1 in wild-type and LOX-1 knockout mice cardiac fibroblasts. <i>J. Biol. Chem.</i> 283 (16) 10226-10231.
Primary	Cortical Neurons	Mouse	Sato, S., Xu, J., Okuyama, S., Martinez, L.B., Walsh, S.M, Jacobsen, M.T, Swan, R.J., Schlautman, J.D., Ciborowski, P. and Ikezu, T. (2008) Spatial learning impairment, enhanced CDK5/p35 activity, and downregulation of NMDA receptor expression in transgenic mice expressing tau-tubulin kinase 1. <i>J Neurosci</i> 28(53): 14511.

Cell Line	Cell Type	Source	Citation
Primary	Arterial Smooth Muscle (PASMIC)	Rat	Lu, W., Wang, J., Peng, G., Shimoda, L.A. and Sylvester, J.T. (2009) Knockdown of Stromal Interaction Molecule 1 Attenuates Store-operated Ca ²⁺ Entry and Ca ²⁺ Responses to Acute Hypoxia in Pulmonary Arterial Smooth Muscle. <i>Am J Physiol Lung Cell Mol Physiol</i> 24 Apr 2009.
Primary	HMVEC	Human	Radu Stefanescu, Dustin Bassett, Rozbeh Modarresi, Francisco Santiago, Mohamad Fakruddin, and Jeffrey Laurence (2008) Synergistic interactions between interferon- γ and TRAIL modulate c-FLIP in endothelial cells, mediating their lineage-specific sensitivity to thrombotic thrombocytopenic purpura plasma-associated apoptosis. <i>Blood</i> 112: 340 - 349.
Primary	Hippocampal	Mouse	Galvin, K.E., Ye, H., Erstad, D.J., Feddersen, R. and Wetmore, C. (2008) Gli1 Induces G2/M Arrest and Apoptosis in Hippocampal but Not Tumor-Derived Neural Stem Cells. <i>Stem Cells</i> 26: 1027 - 1036.
Primary	Bone Marrow Macrophage	Mouse	Zhou, Q., Leeman, S.E. and Amar, S. (2009) Signaling mechanisms involved in altered function of macrophages from diet-induced obese mice affect immune responses. <i>Proc Natl Acad Sci USA</i> 30 106(26): 10740.
Primary	Distal Pulmonary Arterial SMC	Rat	Lu, W., Wang, J., Peng, G., Shimoda, L.A. and Sylvester, J. T. (2009) Knockdown of stromal interaction molecule 1 attenuates store-operated Ca ²⁺ entry and Ca ²⁺ responses to acute hypoxia in pulmonary arterial smooth muscle. <i>Am J Physiol. Lung Cell Mol. Physiol.</i> 297(1): L17-L25.
Primary	Dendritic Cells	Human	Jain, P., Manuel, S.L., Khan, Z.K., Ahuja, J., Quann, K., and Wigdahl, B. (2009) DC-SIGN mediates cell-free infection and transmission of HTLV-1 by dendritic cells. <i>J. Virol.</i> 83(21): 10908-10921.
Primary	Monocytes	Human	Boyle, J.J., Harrington, H.A., Piper, E., Elderfield, K., Stark, J., Landis, R.C. and Haskard, D.O. (2009) Coronary Intraplaque Hemorrhage Evokes a Novel Atheroprotective Macrophage Phenotype. <i>Am. J. Pathol.</i> 174(3): 1097-1108.
Primary	Cardiomyocytes	Rat	Skwarek-Maruszewska, A., Hotulainen, P., Mattila, P.K. and Lappalainen, P. (2009) Contractility-dependent actin

Cell Line	Cell Type	Source	Citation
			dynamics in cardiomyocyte sarcomeres. <i>J. Cell Sci.</i> 122: 2119-2126.
Primary	Cardiomyocytes	Mouse (neonatal)	Lu, L., Timofeyev, V., Li, N., Rafizadeh, S., Singapuri, A., Harris, T.R. and Chiamvimonvat, N. (2009) α -Actinin2 cytoskeletal protein is required for the functional membrane localization of a Ca ²⁺ -activated K ⁺ channel (SK2 channel). <i>Proc. Natl. Acad. Sci.</i> 106(43): 18402-18407.
Primary	Retinal Ganglion Cells	Rat	Hayashi, H., Campenot, R.B., Vance, D.E. and Vance, J.E. (2009) Protection of Neurons from Apoptosis by Apolipoprotein E-containing Lipoproteins Does Not Require Lipoprotein Uptake and Involves Activation of Phospholipase C γ 1 and Inhibition of Calcineurin. <i>J. Biol. Chem.</i> 284(43): 29605-29613.
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Primary	Dendritic Cells	Mouse	Pedersen, C. D., Fang, J. J. and Pedersen, A. E. (2009) A Comparative Study of Transfection Methods for RNA Interference in Bone Marrow-Derived Murine Dendritic Cells. <i>Scandinavian Journal of Immunology</i> 70 (5): 447-456.
Primary HPAEC	Pulmonary Artery Endothelium	Human	Rentsendorj, O., Mirzapoiazova, T., Adyshev, D., Servinsky, L.E., Renne, T., Verin, A.D. and Pearse, D.B. (2008) Role of vasodilator-stimulated phosphoprotein in cGMP-mediated protection of human pulmonary artery endothelial barrier function. <i>Am J Physiol Lung Cell Mol Physiol.</i> 294(4): L686 -L697.
RAW 264.7	Macrophage	Mouse	de Beer, M.C., Zhao, Z., Webb, N.R., van der Westhuyzen, D.R. and de Villiers, W.J.S. (2003) Lack of a direct role for macrosialin in oxidized LDL metabolism. <i>J. Lipid Res.</i> 44: 674 - 685.

Cell Line	Cell Type	Source	Citation
RAW 264.7	Macrophage	Mouse	Liu, X., Yao, M., Li, N., Wang, C., Zheng, Y. and Cao, X. (2008) CaMKII promotes TLR-triggered proinflammatory cytokine and type I interferon production by directly binding and activating TAK1 and IRF3 in macrophages. <i>Blood</i> . 112(13): 4961-4970.
Renca	Renal Cell Carcinoma	Mouse	Ogushi, T., Takahashi, S., Takeuchi, T., Urano, T., Horie-Inoue, K., Kumagai, J., Kitamura, T., Ouchi, Y., Muramatsu, M. and Inoue, S. (2005) Estrogen Receptor-Binding Fragment-Associated Antigen 9 Is a Tumor-Promoting and Prognostic Factor for Renal Cell Carcinoma. <i>Cancer Res</i> . 65(9): p. 3700-3706.
SaOs2	Osteosarcoma	Human	Chu, F., Chou, P.M., Zheng, X., Mirkin, B.L. and Rebbaa, A. (2005) Control of Multidrug Resistance Gene mdr1 and Cancer Resistance to Chemotherapy by the Longevity Gene sirt1. <i>Cancer Res</i> . 65(22): p. 10183-10187.
SaOS2	Osteosarcoma	Human	Zheng, X., Chu, F., Chou, P.M., Gallati, C., Dier, U., Mirkin, B.L., Mousa, S.A. and Rebbaa, A. (2009) Cathepsin L inhibition suppresses drug resistance in vitro and in vivo: a putative mechanism. <i>Am J Physiol Cell Physiol</i> . 296(1): C65.
Saos-2	Osteosarcoma	Human	Zheng, X., Chou, P.M., Mirkin, B.L. and Rebbaa, A. (2004) Senescence-initiated Reversal of Drug Resistance: Specific Role of Cathepsin L. <i>Cancer Res</i> . 64: 1773 - 1780.
CCH196	Sarcoma	Human	Takahashi, A., Higashino, F., Aoyagi, M., Yoshida, K., Itoh, M., Kyo, S., Ohno, T., Taira, T., Ariga, H., Nakajima, K., Hatta, M., Kobayashi, M., Sano, H., Kohgo, T. and Shindoh, M., (2003) EWS/ETS Fusions Activate Telomerase in Ewing's Tumors. <i>Cancer Res</i> . 63: 8338-8344.
SNB19	Glioblastoma	Human	Song, S.W., Fuller, G.N., Zheng, H. and Zhang, W. (2005) Inactivation of the Invasion Inhibitory Gene <i>Ilp45</i> by Alternative Splicing in Gliomas. <i>Cancer Res</i> . 65(9): p. 3562-3567.
SW480	Colon Adenocarcinoma	Human	Zhu, S., Wang, W., Clarke, D.C. and Liu, X. (2007) Activation of <i>Mps1</i> promotes TGF-beta independent Smad signaling. <i>J. Biol. Chem</i> . 282(25): 18327-18338.
U2OS	Osteosarcoma	Human	Hotulainen P. and Lappalainen, P. (2006) Stress fibers are generated by two distinct actin assembly mechanisms in motile cells <i>J. Cell Biol</i> . 173(3): 383.