

## Select Publications

Researchers are successfully using the IncuCyte to support and improve their cell culture in a wide variety of scientific disciplines. We are proud to share this list of publications from the growing community of IncuCyte customers and collaborators. If we missed one, please send the citation to [info@essenbio.com](mailto:info@essenbio.com).

### 2012 Publications

**Modulation and recruitment of inducible regulatory T cells by first trimester trophoblast cells.** Ramhorst R, Fraccaroli L, Aldo P, Alvero AB, Cardenas I, Leiros CP, Mor G, *Am J Reprod Immunol*. 2012 Jan;67(1):17-27  
PMID: 2189477.

**Multimodality animal rotation imaging system (MARS) for *in vivo* detection of intraperitoneal tumors.** Pizzonia J, Holmberg J, Orton S, Alvero A, Viteri O, Mclaughlin W, Feke G, Mor G, *Am J Reprod Immunol*. 2012 Jan;67(1):84-90  
PMID: 21951577

### 2011 Publications

**TLR4-dependent GM-CSF protects against lung injury in gram-negative bacterial pneumonia.** Standiford LR, Standiford TJ, Newstead MJ, Zeng X, Ballinger MN, Kovach MA, Reka AK, Bhan U. *Am J Physiol Lung Cell Mol Physiol*. 2011 Dec 9. [Epub ahead of print]  
PMID: 22160309

**Systematic knockdown of epigenetic enzymes identifies a novel histone demethylase PHF8 overexpressed in prostate cancer with an impact on cell proliferation, migration and invasion.** Björkman M, Ostling P, Härmä V, Virtanen J, Mpindi JP, Rantala J, Mirtti T, Vesterinen T, Lundin M, Sankila A, Rannikko A, Kaivanto E, Kohonen P, Kallioniemi O, Nees M. *Oncogene*. 2011 Nov 28. [Epub ahead of print]  
PMID: 22120715

**Aurora-B mediated ATM serine 1403 phosphorylation is required for mitotic ATM activation and the spindle checkpoint.** Yang C, Tang X, Guo X, Niikura Y, Kitagawa K, Cui K, Wong ST, Fu L, Xu B. *Mol Cell*. 2011 Nov 18;44(4):597-608  
PMID: 22099307

**The SCF-Fbxo40 complex induces IRS1 ubiquitination in skeletal muscle, limiting IGF1 signaling.** Shi J, Luo L, Eash J, Ibebunjo C, Glass DJ. *Dev Cell*. 2011 Nov 15;21(5):835-47  
PMID: 22033112

**RasGRP3, a Ras activator, contributes to signaling and the tumorigenic phenotype in human melanoma.** Yang D, Tao J, Li L, Kedei N, Tóth ZE, Czap A, Velasquez JF, Mihova D, Michalowski AM, Yuspa SH, Blumberg PM. *Oncogene*. 2011 Nov 10;30(45):4590-600  
PMID: 21602881



**Cancer cell dependence on unsaturated fatty acids implicates stearyl-CoA desaturase as a target for cancer therapy**, Roongta UV, Pabalan JG, Wang X, Ryseck RP, Fagnoli J, Henley BJ, Yang WP, Zhu J, Madireddi MT, Lawrence RM, Wong TW, Rupnow BA. **Mol Cancer Res.** 2011 Nov;9(11):1551-61  
PMID: 21954435

**15-hydroxyprostaglandin dehydrogenase associates with poor prognosis in breast cancer, induces epithelial-mesenchymal transition and promotes cell migration in cultured breast cancer cells**. Lehtinen L, Vainio P, Wikman H, Reemts J, Hilvo M, Issa R, Pollari S, Brandt B, Oresic M, Pantel K, Kallioniemi O, Iljin K. **J Pathol.** 2011 Nov 10. [Epub ahead of print]  
PMID: 22072156

**Sox2 and Pax6 maintain the proliferative and developmental potential of gliogenic neural stem cells *in vitro***. Gomez-Lopez S, Wiskow O, Favaro R, Nicolis SK, Price DJ, Pollard SM, Smith A. **Glia.** 2011 Nov;59(11):1588-99  
PMID: 21766338

**Mutant p53 drives multinucleation and invasion through a process that is suppressed by ANKRD11**. Noll JE, Jeffery J, Al-Ejeh F, Kumar R, Khanna KK, Callen DF, Neilsen PM. **Oncogene.** 2011 Oct 10. [Epub ahead of print]  
PMID: 21986947

**A Novel Fc-engineered monoclonal antibody to CD37 with enhanced ADCC and high proapoptotic activity for treatment of B-cell malignancies**. Heider KH, Kiefer K, Zenz T, Volden M, Stilgenbauer S, Ostermann E, Baum A, Lamche H, Kupcu Z, Jacobi A, Muller S, Hirt U, Adolf GR, Borges E. **Blood.** 2011 Oct 13;118(15):4159-68  
PMID: 21795744

**Lysophosphatidic acid and sphingosine-1-phosphate promote morphogenesis and block invasion of prostate cancer cells in three-dimensional organotypic models**. Harma V, Knuutila M, Virtanen J, Mirtti T, Kohonen P, Kovanen P, Happonen A, Kaewphan S, Ahonen I, Kallioniemi O, Grafstrom R, Lotjonen J, Nees M. **Oncogene.** 2011 Sep 26. [Epub ahead of print]  
PMID: 21996742

**The MUC4 membrane-bound mucin regulates esophageal cancer cell proliferation and migration properties: Implication for S100A4 protein**. Bruyere E, Jonckheere N., Frenois F, Mariette C, Van Seuning I, **Biochem Biophys Res Commun.** 2011 Sep 23;413(2):325-9  
PMID: 21889495

**Attenuation of scratch-induced reactive astrogliosis by novel EphA4 kinase inhibitors**. Parmentier-Batteur S, Finger EN, Krishnan R, Rajapakse HA, Sanders JM, Kandpal G, Zhu H, Moore KP, Regan CP, Sharma S, Hess JF, Williams TM, Reynolds IJ, Vacca JP, Mark RJ, Nantermet PG. **J Neurochem.** 2011 Sep;118(6):1016-31  
PMID: 21796568

**FlnA-null megakaryocytes prematurely release large and fragile platelets that circulate poorly**. Jurak Begonja A, Hoffmeister KM, Hartwig JH, Falet H. **Blood.** 2011 Aug 25;118(8):2285-95  
PMID: 21652675

**Targeting the mitochondria activates two independent cell death pathways in ovarian cancer stem cells**. Alvero AB, Montagna MK, Holmberg JC, Craveiro V, Brown D, Mor G. **Mol Cancer Ther.** 2011 Aug;10(8): 1385-93  
PMID: 21677151



**Identification of miR-193b targets in breast cancer cells and systems biological analysis of their functional impact.** Leivonen SK, Rokka A, Ostling P, Kohonen P, Corthals G, Kallioniemi O, Perala M. **Mol Cell Proteomics.** 2011 Jul;10(7);M110.005322

PMID: 21512034

**Identification and characterization of a novel transcriptional target of RUNX1/AML1 at the onset of hematopoietic development.** Ferreras C, Lancrin C, Lie-A-Ling M, Kouskoff V, Lacaud G. **Blood.** 2011 Jul 21;118(3);594-7

PMID: 21498670

**Phenotype-based drug screening in primary ovarian carcinoma cultures identifies intracellular iron depletion as a promising strategy for cancer treatment.** Gullbo J, Fryknäs M, Rickardson L, Darcy P, Hägg M, Wickström M, Hassan S, Westman G, Brnjic S, Nygren P, Linder S, Larsson R. **Biochem Pharmacol.** 2011 Jul 15;82(2);139-47

PMID: 21531212

**Inhibition of Aurora-A kinase induces cell cycle arrest in epithelial ovarian cancer stem cells by affecting NFκB pathway.** Chefetz I, Holmberg J, Alvero AB, Visintin I, Mor G, **Cell Cycle.** 2011 Jul 1;10(13):2206-14

PMID: 21623171

**The synthetic bryostatin analog Merle 23 dissects distinct mechanisms of bryostatin activity in the LNCaP human prostate cancer cell line.** Kedei N, Telek A, Czap A, Lubart ES, Czifra G, Yang D, Chen J, Morrison T, Goldsmith PK, Lim L, Mannan P, Garfield SH, Kraft MB, Li W, Keck GE, Blumberg PM. **Biochem Pharmacol.** 2011 Jun 1;81(11);1296-308.

PMID: 21458422

**Efficacy of ganitumab (AMG 479), alone and in combination with rapamycin, in Ewing's and osteogenic sarcoma models.** Beltran PJ, Chung YA, Moody G, Mitchell P, Cajulis E, Vonderfecht S, Kendall R, Radinsky R, Calzone FJ. **J Pharmacol Exp Ther.** 2011 Jun;337(3);644-54

PMID: 2138591

**AMPK regulates metabolism and survival in response to ionizing radiation.** Zannella VE, Cojocari D, Hilgendorf S, Vellanki RN, Chung S, Wouters BG, Koritzinsky M. **Radiother Oncol.** 2011 Jun;99(3);293-9

PMID: 21715037

**Interplay between FGF2 and BMP controls the self-renewal, dormancy and differentiation of rat neural stem cells.** Sun Y, Hu J, Zhou L, Pollard SM, Smith A. **J Cell Sci.** 2011 Jun 1;124(Pt 11):1867-77

PMID: 21558414

**Some phorbol esters might partially resemble bryostatin 1 in their actions on LNCaP prostate cancer cells and U937 leukemia cells.** Kedei N, Lubart E, Lewin NE, Telek A, Lim L, Mannan P, Garfield SH, Kraft MB, Keck GE, Kolusheva S, Jelinek R, Blumberg PM., **Chembiochem.** 2011 May 16;12(8);1242-51.

PMID: 21542090

**Transducin-like enhancer protein 1 mediates estrogen receptor binding and transcriptional activity in breast cancer cells.** Holmes KA, Hurtado A, Brown GD, Launchbury R, Ross-Innes CS, Hadfield J, Odom DT, Carroll JS. **Proc Natl Acad Sci U S A.** 2011 May 2. [Epub ahead of print]

PMID: 21536917



**Endocannabinoids regulate the migration of subventricular zone-derived neuroblasts in the postnatal brain.** Oudin MJ, Gajendra S, Williams G, Hobbs C, Lalli G, Doherty P. *J Neurosci*. 2011 Mar 16;31(11):4000-11.

PMID: 21411643

**High frequency of TTK mutations in microsatellite-unstable colorectal cancer and evaluation of their effect on spindle-assembly checkpoint.** Niittymäki I, Gylfe A, Laine L, Laakso M, Lehtonen HJ, Kondelin J, Tolvanen J, Nousiainen K, Pouwels J, Järvinen H, Nuorva K, Mecklin JP, Mäkinen M, Ristimäki A, Orntoft TF, Hautaniemi S, Karhu A, Kallio MJ, Aaltonen LA. *Carcinogenesis*. 2011 Mar;32(3):305-11. Epub 2010 Dec 16.

PMID: 21163887

**Osteogenic differentiation of miniature pig mesenchymal stem cells in 2D and 3D environment.** Juhasova J, Juhas S, Klima J, Strnadel J, Holubova M, Motlik J. *Physiol Res*. 2011;60(3):559-71

PMID: 21401296

**Chromosomal Instability Confers Intrinsic Multidrug Resistance.** Lee AJ, Endesfelder D, Rowan AJ, Walther A, Birkbak NJ, Futreal PA, Downward J, Szallasi Z, Tomlinson IP, Howell M, Kschischo M, Swanton C. *Cancer Res*. 2011 Mar 1;71(5):1858-1870.

PMID: 21363922

**Role of transcription factor T (brachyury) in the pathogenesis of sporadic chordoma: a genetic and functional-based study.** Presneau N, Shalaby A, Ye H, Pillay N, Halai D, Idowu B, Tirabosco R, Whitwell D, Jacques TS, Kindblom LG, Brüderlein S, Möller P, Leithner A, Liegl B, Amary FM, Athanasou NN, Hogendoorn PC, Mertens F, Szuhai K, Flanagan AM. *J Pathol*. 2011 Feb;223(3):327-35

PMID: 21171078

**The Role of epidermal growth factor receptor in chordoma pathogenesis: a potential therapeutic target.** Shalaby A, Presneau N, Ye H, Halai D, Berisha F, Idowu B, Leithner A, Liegl B, Briggs TR, Bacsı K, Kindblom LG, Athanasou N, Amary MF, Hogendoorn PC, Tirabosco R, Flanagan AM. *J Pathol*. 2011 Feb;223(3):336-46

PMID: 21171079

**CASZ1, a candidate tumor-suppressor gene, suppresses neuroblastoma tumor growth through reprogramming gene expression.** Liu Z, Yang X, Li Z, McMahon C, Sizer C, Barenboim-Stapleton L, Bliskovsky V, Mock B, Ried T, London WB, Maris J, Khan J, Thiele CJ. *Cell Death Differ*. 2011 Jan 21. [Epub ahead of print]

PMID: 21252912

**Thrombin-induced activation of astrocytes in mixed rat hippocampal cultures is inhibited by soluble thrombomodulin.** Niego B, Samson AL, Petersen KU, Medcalf RL. *Brain Res*. 2011 Mar 24;1381:38-51. Epub 2011 Jan 15.

PMID: 21241677

**Loss of p38Gamma MAPK induces pleiotropic mitotic defects and massive cell death.** Kukkonen-Macchi A, Sicora O, Kaczynska K, Oetken-Lindholm C, Pouwels J, Laine L, Kallio MJ. *J Cell Sci*. 2011 Jan 15;124(Pt 2):216-27

PMID: 21172807

**RAC3 is a pro-migratory co-activator of ERα.** Walker MP, Zhang M, Le TP, Laine M, Greene GL. *Oncogene*. 2011 Jan 10 [Epub ahead of print].

PMID: 21217774



## 2010 Publications

**Peroxisome Proliferator-Activated Receptor- $\gamma$  Activation Inhibits Tumor Metastasis by Antagonizing Smad3-Mediated Epithelial-Mesenchymal Transition.** Reka AK, Kurapati H, Narala VR, Bommer G, Chen J, Standiford TJ, Keshamouni VG. **Mol Cancer Ther.** 2010 Dec;9(12):3221-32. PMID: 21159608

**Allosteric Peptide Activators of Pro-Hepatocyte Growth Factor Stimulate Met Signaling.** Landgraf KE, Santell L, Billeci KL, Quan C, Young JC, Maun HR, Kirchhofer D, Lazarus RA. **J Biol Chem.** 2010 Dec 17;285(51):40362-72. Epub 2010 Oct 11. PMID: 20937841

**Pim-selective inhibitor DHPCC-9 reveals Pim kinases as potent stimulators of cancer cell migration and invasion.** Santio NM, Vahakoski RL, Rainio EM, Sandholm JA, Virtanen SS, Prudhomme M, Anizon F, Moreau P, Koskinen PJ. **Mol Cancer.** 2010 Oct 19;9(1):279. [Epub ahead of print]. PMID: 20958956

**RasGRP3 Contributes to formation and maintenance of the prostate cancer phenotype.** Yang D, Kedei N, Li L, Tao J, Velasquez JF, Michalowski AM, Tóth BI, Marincsák R, Varga A, Bíró T, Yuspa SH, Blumberg PM. **Cancer Res.** 2010 Oct 15;70(20):7905-17. Epub 2010 Sep 28. PMID: 20876802

**Expression of Neuregulin 4 splice variants in normal human tissues and prostate cancer and their effects on cell motility.** Hayes N, Blackburn E, Boyle M, Russell G, Frost T, Morgan B, Gullick W. **Endocr Relat Cancer** 2010 Oct 19 [Epub ahead of print]. PMID 20959441

**Enhancement of proteasome activity by a small-molecule inhibitor of USP14.** Lee BH, Lee MJ, Park S, Oh DC, Elsasser S, Chen PC, Gartner C, Dimova N, Hanna J, Gygi SP, Wilson SM, King RW, Finley D. **Nature.** 2010 Sep 9;467(7312):179-84. PMID: 20829789

**Imaging-based chemical screens using normal and glioma-derived neural stem cells.** Danovi D, Falk A, Humphreys P, Vickers R, Tinsley J, Smith AG, Pollard SM. **Biochem Soc Trans.** 2010 Aug;38(4):1067-71. PMID: 20659005

**Serum response factor is an essential transcription factor in megakaryocytic maturation.** Halene S, Gao Y, Hahn K, Massaro S, Italiano JE Jr, Schulz V, Lin S, Kupfer GM, Krause DS. **Blood.** 2010 Sep 16;116(11):1942-50. Epub 2010 Jun 4. PMID: 20525922

**Selenoproteins are essential for proper keratinocyte function and skin development.** Sengupta A, Lichti UF, Carlson BA, Ryscavage AO, Gladyshev VN, Yuspa SH, Hatfield DL. **PLoS One.** 2010 Aug 18;5(8):e12249. PMID: 20805887

**The CASPR2 cell adhesion molecule functions as a tumor suppressor gene in glioma.** Bralten LB, Gravendeel AM, Kloosterhof NK, Sacchetti A, Vrijenhoek T, Veltman JA, van den Bent MJ, Kros JM, Hoogenraad CC, Sillevius Smitt PA, French PJ. **Oncogene.** 2010 Aug 16. [Epub ahead of print] PMID: 20711234



**Glycogen synthase kinase 3 regulates PAX3–FKHR-mediated cell proliferation in human alveolar rhabdomyosarcoma cells.**

Zeng FY, Dong H, Cui J, Liu L, Chen T., *Biochem Biophys Res Commun.* 2010 Jan 1;391(1):1049-1055. Epub 2009 Dec 6.  
PMID: 19995556

**Performance of Mouse Neural Stem Cells as a Screening Reagent: Characterization of PAC1 Activity in Medium-Throughput Functional Assays.**

Lodge AP, Langmead CJ, Daniel G, Anderson G, Werry T., *J Biomol Screen.* 2010 Feb;15(2):159-68. Epub 2009 Dec 30.  
PMID: 20042531

**A comprehensive panel of three-dimensional models for studies of prostate cancer growth, invasion and drug responses.** Härmä V, Virtanen J, Mäkelä R, Happonen A, Mpindi JP, Knuuttila M, Kohonen P, Lötjönen J, Kallioniemi O, Nees M. *PLoS One.* 2010 May 3;5(5):e10431.  
PMID: 20454659

**Src Family Kinase Inhibitor Saracatinib (AZD0530) Impairs Oxaliplatin Uptake in Colorectal Cancer Cells and Blocks Organic Cation Transporters.** Morrow CJ, Ghattas M, Smith C, Bönisch H, Bryce RA, Hickinson DM, Green TP, Dive C. *Cancer Res.* 2010 Jun 15. [Epub ahead of print].  
PMID: 20551056

**Double-regulated oncolytic adenovirus-mediated interleukin-24 overexpression exhibits potent antitumor activity on gastric adenocarcinoma.** Wei N, Fan JK, Gu JF, Liu XY. *Hum Gene Ther.* 2010 Jul;21(7):855-64.  
PMID: 20163249

**A novel role for wnt/ca signaling in actin cytoskeleton remodeling and cell motility in prostate cancer.** Wang Q, Symes AJ, Kane CA, Freeman A, Nariculam J, Munson P, Thrasivoulou C, Masters JR, Ahmed A. *PLoS One.* 2010 May 4;5(5):e10456.  
PMID: 20454608

**The COX-2 inhibitors, meloxicam and nimesulide, suppress neurogenesis in the adult mouse brain.** Goncalves MB, Williams EJ, Yip P, Yáñez-Muñoz RJ, Williams G, Doherty P. *Br J Pharmacol.* 2010 Mar;159(5):1118-25. Epub 2010 Feb 5.  
PMID: 20136845

**Exploiting the superior protein resistance of polymer brushes to control single cell adhesion and polarisation at the micron scale.** Gautrot JE, Trappmann B, Ocegüera-Yanez F, Connelly J, He X, Watt FM, Huck WT. *Biomaterials.* 2010 Jun;31(18):5030-41. Epub 2010 Mar 26.  
PMID: 20347135

**Use of cryopreserved cell aliquots in the high-throughput screening of small interfering RNA libraries.** Swearingen EA, Fajardo F, Wang X, Watson JE, Quon KC, Kassner PD. *J Biomol Screen.* 2010 Jun;15(5):469-77. Epub 2010 Apr 6.  
PMID: 2037186



## 2009 Publications

**Deficient carbonic anhydrase 9 expression in UPR-impaired cells is associated with reduced survival in an acidic microenvironment.** van den Beucken T, Ramaekers CH, Rouschop K, Koritzinsky M, Wouters BG. *Radiother Oncol.* 2009 Sep;92(3):437-42. Epub 2009 Jul 15. PMID: 19615771

**Glioma stem cell lines expanded in adherent culture have tumor-specific phenotypes and are suitable for chemical and genetic screens.**

Pollard SM, Yoshikawa K, Clarke ID, Danov D, Stricker S, Russell R, Bayani J, Head R, Lee M, Bernstein M, Squire JA, Smith A, Dirks P., *Cell Stem Cell.* 2009 Jun 5; 4(6):568-80. PMID: 19497285

**Multipotent CD15+ cancer stem cells in patched-1-deficient mouse medulloblastoma.**

Ward RJ, Lee L, Graham K, Satkunendran T, Yoshikawa K, Ling E, Harper L, Austin R, Nieuwenhuis E, Clarke ID, Hui CC, Dirks PB., *Cancer Research.* 2009 Jun. 1; 69(11):4682-90. PMID: 19487286

**7-(O)-Carboxymethyl daidzein conjugated to N-t-Boc-hexylenediamine: A novel compound capable of inducing cell death in epithelial ovarian cancer stem cells.**

Green JM, Alvero AB, Kohen F, Mor G., *Cancer Biology & Therapy.* 2009 Sep. 17;8(18). PMID: 19738422

**Stem-like ovarian cancer cells can serve as tumor vascular progenitors.** Alvero AB, Fu HH, Holmberg J, Visintin I, Mor L, Marquina CC, Oidtman J, Silasi DA, Mor G. *Stem Cells* 2009 Oct;27(10):2405-13.

PMID: 19658191

**Nec12 regulates epidermal adhesion and wound repair.** Giangreco A, Jensen KB, Takai Y, Miyoshi J, Watt FM. *Development.* 2009 Oct;136(20):3505-14.

PMID: 19783739

**Base excision by thymine DNA glycosylase mediates DNA-directed cytotoxicity of 5-fluorouracil.** Kunz C, Focke F, Saito Y, Schuermann D, Lettieri T, Selfridge J, Schär P. *PLoS Biol.* 2009 Apr 28;7(4):e91.

PMID: 19402749

## 2008 Publications

**Long-term tripotent differentiation capacity of human neural stem (NS) cells in adherent culture.**

Sun Y, Pollard S, Conti L, Toselli M, Biella G, Parkin G, Willatt L, Falk A, Cattaneo E, Smith A. *Mol Cell Neurosci.* 2008 Jun;38(2):245-58. Epub 2008 Mar 18.

PMID: 18450476

**Generation of bone marrow derived murine dendritic cells for use in 2-photon imaging.**

Matheu MP, Sen D, Cahalan MD, Parker I., *Journal of Visual Experimentation.* 2008 Jul. 9;(17). pii: 773. doi: 10.3791/773. PMID: 19066518

**Regulation of mouse lung development by the extracellular calcium-sensing receptor, CaR.**

Finney BA, del Moral PM, Wilkinson WJ, Cayzac S, Cole M, Warburton D, Kemp PJ, Riccardi D. **J Physiol.** 2008 Dec 15;586(Pt 24):6007-19. Epub 2008 Oct 27.

PMID: 18955379

**The application of cell-based label-free technology in drug discovery.** Xi B, Yu N, Wang X, Xu X, Abassi YA. **Biotechnol J.** 2008 Apr;3(4):484-95.

PMID: 18412175

## 2007 Publications

**Molecular interactions between T cells and fibroblast-like synoviocytes: role of membrane tumor necrosis factor-alpha on cytokine-activated T cells.**

Tran CN, Lundy SK, White PT, Endres JL, Motyl CD, Gupta R, Wilke CM, Shelden EA, Chung KC, Urquhart AG, Fox DA., **American Journal of Pathology.** 2007 Nov. 171(5):1588-98.

PMID: 178232