

# ImageStream<sup>®</sup> System

## Selected Scientific and Technical Publications



**Human anti-HIV-neutralizing antibodies frequently target a conserved epitope essential for viral fitness—Pietzsch et.al.**  
*J Exp Med.* 2010 Aug 2. [Epub ahead of print]

**miR-451 protects against erythroid oxidant stress by repressing 14-3-3(zeta)—Yu et.al.**  
*Genes Dev.* 2010 Aug 1;24(15):1620-33.

**Merocytic Dendritic Cells Break T Cell Tolerance to b Cell Antigens in Nonobese Diabetic Mouse Diabetes—Katz et.al.**  
*Journal of Immunology* (2010) Jul 19;Epub ahead of print

**Apoptosis is regulated by the VDAC1 N-terminal region and by VDAC oligomerization: release of cytochrome c, AIF and Smac/Diablo—Shoshan-Barmatz et.al.**  
*Biochim Biophys Acta.* 2010 June - July;1797(6-7):1281-1291. Epub 2010 Mar 6.

**Virally infected and matured human dendritic cells activate natural killer cells via cooperative activity of plasma membrane-bound TNF and IL-15—Vujanovic et.al.**  
*Blood.* 2010 Jul 29;116(4):575-83. Epub 2010 Apr 29.

**Impaired expression and function of toll-like receptor 7 in hepatitis C virus infection in human hepatoma cells—Chang et.al.**  
*Hepatology.* 2010 Jan;51(1):35-42.

**Macrophage activation differentially modulates particle binding, phagocytosis and downstream antimicrobial mechanisms—Rieger et.al.**  
*Dev Comp Immunol.* 2010 Jun 25. Epub ahead of print

**Mitochondrial translocation of oxidized cofilin induces caspase-independent necrotic-like programmed cell death of T cells—Wabnitz et.al.**  
*Cell Death and Disease* (2010) 1, e58

**Conventional apoptosis assays using propidium iodide generate a significant number of false positives that prevent accurate assessment of cell death—Reiger et.al.**  
*PNAS* (2010) Jun 30;358(1-2):81-92. Epub 2010 Apr 7

**Novel anti-adipogenic activity produced by human fibroblasts—Lehmann et.al.**  
*Am J Physiol Cell Physiol.* 2010 Jun 16. [Epub ahead of print]

**Regulation of Virulence of Entamoeba histolytica by the URE3-BP Transcription Factor—Gilchrist et.al.**  
*mBio.* 2010 May 18;1(1). pii: e00057-10.

**Uptake and Intracellular Fate of Disulfide-Bonded Polymer Hydrogel Capsules for Doxorubicin Delivery to Colorectal Cancer Cells—Yan et.al.**  
*ACS Nano.* 2010 May 25;4(5):2928-36

**yc deficiency precludes CD8+ T cell memory despite formation of potent T cell effectors—Decaluwe et.al.**  
*PNAS* (2010) May 3 [Epub ahead of print]

**Cytometry in Cell Necrobiology Revisited. Recent Advances and New Vistas—Wlodkowic et.al.**  
*Cytometry A.* 2010 Mar 16. [Epub ahead of print]

**KU812 cells provide a novel in vitro model of the human IL-33/ST2L axis: Functional responses and identification of signaling pathways—Tare et.al.**  
*Exp Cell Res.* 2010 Apr 18. [Epub ahead of print]

**CCR9 mediates PI3K/AKT-dependent antiapoptotic signals in prostate cancer cells and inhibition of CCR9-CCL25 interaction enhances the cytotoxic effects of etoposide—Sharma et.al.**  
*Int J Cancer* (2010) Feb 2 [Epub ahead of print]

**Dendritic cells control T cell tonic signaling required for responsiveness to foreign antigen—Hochweller et.al.**  
*PNAS* (2010) 107(13):5931-6.

**Characterization of the Murine SIRT3 Mitochondrial Localization Sequence and Comparison of Mitochondrial Enrichment and Deacetylase Activity of Long and Short SIRT3 Isoforms—Bao et.al.**  
*Journal of Cellular Biochemistry* (2010) 9999:1-10

**Unique biological properties of catalytic domain directed human anti-CAIX antibodies discovered through phage-display technology—Xu et.al.**  
*PLoS One.* 2010 Mar 10;5(3):e9625

**Members of the Entamoeba histolytica transmembrane kinase family play non-redundant roles in growth and phagocytosis—Buss et.al.**  
*International Journal for Parasitology* (2010) Jun;40(7):833-43

**TGF-β regulates T-cell neurokinin-1 receptor internalization and function—Beinborn et.al.**  
*PNAS* (2010) 107(9):4293-8

**HIV-1 Nef inhibits ruffles, induces filopodia and modulates migration of infected lymphocytes—Nobile et.al.**  
*Journal of Virology* (2010) 84(5):2282-93

**Peroxiredoxin 1 Stimulates Secretion of Proinflammatory Cytokines by Binding to TLR4—Riddell et.al.**  
*Journal of Immunology* (2009) 184: 1022-30

**Immune synapse formation determines interaction forces between T cells and antigen-presenting cells measured by atomic force microscopy—Hosseini et.al.**  
*PNAS* (2009) 106(42): 17852-57.

**Numbers matter: quantitative and dynamic analysis of the formation of an immunological synapse using imaging flow cytometry—Ahmed et.al.**  
*Journal of Immunological Methods* (2009) 347: 79-86.

**Clinical and biological significance of CXCR5 expressed by prostate cancer specimens and cell lines Singh et.al.**  
*International Journal of Cancer* (2009) 125(10):2288-95.

**NF-E2-related factor 2 regulates the stress response to UVA-1-oxidized phospholipids in skin cells—Gruber et.al.**  
*FASEB Journal* (2010) 24(1):39-48.

**The Urokinase Plasminogen Activator Receptor Promotes Efferocytosis of Apoptotic Cells—D'mello et.al.**  
*The Journal of Biological Chemistry* (2009) 284(25):17030–17038

**Alpha6beta4 integrin crosslinking induces EGFR clustering and promotes EGF-mediated Rho activation in breast cancer—Gilcrease et.al.**

*Journal of Experimental & Clinical Cancer Research* (2009) 28:67-77

**Differential Association of Programmed Death-1 and CD57 with Ex Vivo Survival of CD8 $\alpha$  T Cells in HIV Infection—Petrovas et.al.**

*The Journal of Immunology* (2009) 183:1120–1132

**Binding of Submaximal C1q Promotes Complement-Dependent Cytotoxicity (CDC) of B Cells Oponized with Anti-CD20 mAbs Ofatumumab (OFA) or Rituximab (RTX): Considerably Higher Levels of CDC Are Induced by OFA than by RTX—Pawluczowycz et.al.**

*The Journal of Immunology* (2009) 183:749–758

**Statins inhibit NK-cell cytotoxicity by interfering with LFA-1-mediated conjugate formation—Raemer et.al.**

*European Journal of Immunology* (2009) 39(6):1456-65

**Retinoic acid induces nuclear accumulation of Raf1 during differentiation of HL-60 cells—Smith et.al.**

*Experimental Cell Research* (2009) 315(13):2241-2248

**Identification of a dendritic cell receptor that couples sensing of necrosis to immunity—Sancho et.al..**

*Nature* (2009) 458:899-903

**Distinct Regulation of Integrin-Dependent T Cell Conjugate Formation and NF- $\kappa$ B Activation by the Adapter Protein ADAP—Burbach et.al.**

*The Journal of Immunology* (2008) 181:4840-4851

**Binding, Internalization, and Antigen Presentation of Vaccine-Loaded Nanoengineered Capsules in Blood—De Rose et.al.**

*Advanced Materials* (2008) 20:4698-4703

**Akt inhibition promotes autophagy and sensitizes PTEN-null tumors to lysosomotropic agents—Degtyarev et.al.**

*The Journal of Cell Biology* (2008) 183(1):101-116

**Lytic Granule Loading of CD8<sup>+</sup> T Cells Is Required for HIV-Infected Cell Elimination Associated with Immune Control—Migueles et.al.**

*Immunity* (2008) 29:1009-1021

**CD44 Deficiency Attenuates Chronic Murine Ileitis—Collins et.al.**

*Gastroenterology* (2008) 135:1993-2002

**Binding of Rituximab, Trastuzumab, Cetuximab, or mAb T101 to Cancer Cells Promotes Trogocytosis Mediated by THP-1 Cells and Monocytes—Beum et.al.**

*The Journal of Immunology* (2008) 181(11):8120-8132

**Interferon regulatory factor 7-mediated responses are defective in cord blood plasmacytoid dendritic cells—Danis et.al.**

*European Journal of Immunology* (2008) 38 (2):507-17

**Deregulation of c-Myc Confers Distinct Survival Requirements for Memory B Cells, Plasma Cells, and Their Progenitors—Khuda et.al.**

*The Journal of Immunology* (2008) 181(11):7537-7549

**Multispectral imaging of hematopoietic cells: Where flow meets morphology—McGrath et.al.**

*Journal of Immunological Methods* (2008) 336:91-97

**Quantitative image based apoptotic index measurement using multispectral imaging flow cytometry: a comparison with standard photometric methods—Henery et.al.**

*Apoptosis* (2008) 13:1054-1063

**Optimization of Yeast Cell Cycle Analysis and Morphological Characterization by Multispectral Imaging Flow Cytometry—Calvert et.al.**

*Cytometry Part A* (2008) 73A:825-833

**Autophosphorylation docking site Tyr867 in Merck allows for dissociation of multiple signaling pathways for phagocytosis of apoptotic cells and downmodulation of LPS-inducible NF- $\kappa$ B transcriptional activation—Tibrewal et.al.**

*Journal of Biological Chemistry* (2008) 283(6):3618-3627

**Image-Based Study of Interferogenic Interactions between Plasmacytoid Dendritic Cells and HSV-Infected Monocyte-Derived Dendritic Cells—Megjugorac et.al.**

*Immunological Investigations* (2007) 36:739–761

**Enucleation of primitive erythroid cells generates a transient population of “pyrenocytes” in the mammalian fetus—McGrath et.al.**

*Blood* (2008) 111:2409-2417.

**Morphological characterization of very small embryonic-like stem cells (VSELs) by ImageStream system analysis—Zuba-Surma et.al.**

*Journal of Cellular and Molecular Medicine* (2007) 12(1):292-303

**IFN- $\alpha$  Is Not Sufficient to Drive Th1 Development Due to Lack of Stable T-bet Expression—Ramos et.al.**

*The Journal of Immunology* (2007) 179:3792–3803

**Cellular Image Analysis and Imaging by Flow Cytometry—Basiji et.al.**

*Clinics in Laboratory Medicine* (2007) 27:653-670

**Temporal Dissection of T-bet Functions—Matsuda et.al.**

*The Journal of Immunology* (2007) 178:3457-3465

**Intracellular Kaposi’s Sarcoma-Associated Herpesvirus Load Determines Early Loss of Immune Synapse Components—Adang et.al.**

*Journal of Virology* (2007) 81(10):5079-5090

**Extended Depth of Field Imaging for High Speed Cell Analysis—Ortyn et.al.**

*Cytometry Part A* (2007) 71A:215-231

**Autophagy-Dependent Viral Recognition by Plasmacytoid Dendritic Cells—Lee et.al.**

*Science* (2007) 315:1398-1401

**The unexpected effect of cyclosporin A on CD56<sup>+</sup>CD16<sup>+</sup> and CD56<sup>+</sup>CD16<sup>+</sup> natural killer cell subpopulations—Wang et.al.**

*Blood* (2007) 110:1530-1539

**Quantitative analysis of protein co-localization on B cells opsonized with rituximab and complement using the ImageStream multispectral imaging flow cytometer—Beum et.al.**

*Journal of Immunological Methods* (2006) 317:90-99

**Receptor Cross-Linking on Human Plasmacytoid Dendritic Cells Leads to the Regulation of IFN- $\alpha$  Production—Fanning et.al.**

*The Journal of Immunology* (2006) 177:5829-5839

**Asynchronous Progression through the Lytic Cascade and Variations in Intracellular Viral Loads Revealed by High-Throughput Single-Cell Analysis of Kaposi’s Sarcoma-Associated Herpesvirus Infection—Adang et.al.**

*Journal of Virology* (2006) 80:10073-10082

**Sensitivity Measurement and Compensation in Spectral Imaging—Ortyn et.al.**

*Cytometry Part A* (2006) 69A:852-862

**Quantitative Measurement of Nuclear Translocation Events using Similarity Analysis of Multispectral Cellular Images Obtained in Flow—George et.al.**

*Journal of Immunological Methods* (2006) 311:117-129