

Publications

Kloss F, Gerbach S (2018) Hürden und Aussichten neuer antimikrobieller Konzepte in Forschung und Entwicklung. [Obstacles and perspectives of new antimicrobial concepts within research and development]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz* 61(5), 595-605. (Review)

Koch S, Helbing I, Böhmer SA, Hayashi M, Claesson-Welsh L, Söderberg O, Böhmer FD (2016) In Situ Proximity Ligation Assay (In Situ PLA) to Assess PTP-Protein Interactions. *Methods Mol Biol* 1447, 217-242.

Koch S, van Meeteren LA, Morin E, Testini C, Weström S, Björkelund H, Le Jan S, Adler J, Berger P, Claesson-Welsh L (2014) NRP1 presented in trans to the endothelium arrests VEGFR2 endocytosis, preventing angiogenic signaling and tumor initiation. *Dev Cell* 28(6), 633-646.

Hayashi M, Majumdar A, Li X, Adler J, Sun Z, Vertuani S, Hellberg C, Mellberg S, Koch S, Dimberg A, Koh GY, Dejana E, Belting HG, Affolter M, Thurston G, Holmgren L, Vestweber D, Claesson-Welsh L (2013) VE-PTP regulates VEGFR2 activity in stalk cells to establish endothelial cell polarity and lumen formation. *Nat Commun* 4, 1672.

Köthe S, Müller JP, Böhmer SA, Tschongov T, Fricke M, Koch S, Thiede C, Requardt RP, Rubio I, Böhmer FD (2013) Features of Ras activation by a mislocalized oncogenic tyrosine kinase: FLT3 ITD signals through K-Ras at the plasma membrane of acute myeloid leukemia cells. *J Cell Sci* 126(Pt 20), 4746-4755.

Ortlepp C, Steudel C, Heiderich C, Koch S, Jacobi A, Ryser M, Brenner S, Bornhäuser M, Brors B, Hofmann WK, Ehninger G, Thiede C (2013) Autotaxin is expressed in FLT3-ITD positive acute myeloid leukemia and hematopoietic stem cells and promotes cell migration and proliferation. *Exp Hematol* 41(5), 444-461.e4.

Koch S (2012) Neuropilin signalling in angiogenesis. *Biochem Soc Trans* 40(1), 20-25.

Koch S, Claesson-Welsh L (2012) Signal transduction by vascular endothelial growth factor receptors. *Cold Spring Harb Perspect Med* 2(7), a006502.

Koch S, Tugues S, Li X, Gualandi L, Claesson-Welsh L (2011) Signal transduction by vascular endothelial growth factor receptors. *Biochem J* 437(2), 169-183.

Tugues S, Koch S, Gualandi L, Li X, Claesson-Welsh L (2011) Vascular endothelial growth factors and receptors: anti-angiogenic therapy in the treatment of cancer. *Mol Aspects Med* 32(2), 88-8111.

Jacobi A, Thieme S, Lehmann R, Ugarte F, Malech HL, Koch S, Thiede C, Müller K, Bornhäuser M, Ryser M, Brenner S (2010) Impact of CXCR4 inhibition on FLT3-ITD-positive human AML blasts. *Exp Hematol* 38(3), 180-190.

Nilsson I, Bahram F, Li X, Gualandi L, Koch S, Jarvius M, Söderberg O, Anisimov A, Kholová I, Pytowski B, Baldwin M, Ylä-Herttuala S, Alitalo K, Kreuger J, Claesson-Welsh L (2010) VEGF receptor 2/-3 heterodimers detected in situ by proximity ligation on angiogenic sprouts. *EMBO J* 29(8), 1377-1388.

Stölzel F, Steudel C, Oelschlägel U, Mohr B, Koch S, Ehninger G, Thiede C (2010) Mechanisms of resistance against PKC412 in resistant FLT3-ITD positive human acute myeloid leukemia cells. *Ann Hematol* 89(7), 653-662.

Schmidt-Arras D, Böhmer SA, Koch S, Müller JP, Blei L, Cornils H, Bauer R, Korasikha S, Thiede C, Böhmer FD (2009) Anchoring of FLT3 in the endoplasmic reticulum alters signaling quality. *Blood* 113(15), 3568-3576.

Verstraete K, Koch S, Ertugrul S, Vandenberghe I, Aerts M, Vandriessche G, Thiede C, Savvides SN (2009) Efficient production of bioactive recombinant human Flt3 ligand in *E. coli*. *Protein J* 28(2), 57-65.

Koch S, Jacobi A, Ryser M, Ehninger G, Thiede C (2008) Abnormal localization and accumulation of FLT3-ITD, a mutant receptor tyrosine kinase involved in leukemogenesis. *Cells Tissues Organs* 188(1-2), 225-235.

Thiede C, Koch S, Creutzig E, Steudel C, Illmer T, Schaich M, Ehninger G (2006) Prevalence and prognostic impact of NPM1 mutations in 1485 adult patients with acute myeloid leukemia (AML). *Blood* 107(10), 4011-4020.

Neuschäfer-Rube F, Engemaier E, Koch S, Böer U, Püschel GP (2003) Identification by site-directed mutagenesis of amino acids contributing to ligand-binding specificity or signal transduction properties of the human FP prostanoid receptor. *Biochem J* 371(Pt 2), 443-449.

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