

Ausgewählte Publikationen

Kleiner S, Rüdric U, Gehring M, Loser K, Eiz-Vesper B, Noubissi Nzeteu GA, Patsinakidis N, Meyer NH, Gibbs BF, Raap U (2021) Human basophils release the anti-inflammatory cytokine IL-10 following stimulation with α -melanocyte-stimulating hormone. *J Allergy Clin Immunol* 147:1521-1523.

Ostkamp P, Salmen A, Pignolet B, Görlich D, Andlauer TFM, Schulte-Mecklenbeck A, Gonzalez-Escamilla G, Bucciarelli F, Gennero I, Breuer J, Antony G, Schneider-Hohendorf T, Mykicky N, Bayas A, Then Bergh F, Bittner S, Hartung HP, Friese MA, Linker RA, Luessi F, Lehmann-Horn K, Mühlau M, Paul F, Stangel M, Tackenberg B, Tumani H, Warnke C, Weber F, Wildemann B, Zettl UK, Ziemann U, Müller-Myhsok B, Kümpfel T, Klotz L, Meuth SG, Zipp F, Hemmer B, Hohlfeld R, Brassat D, Gold R, Gross CC, Lukas C, Groppa S, Loser K, Wiendl H, Schwab N; German Competence Network Multiple Sclerosis (KKNMS) and the BIONAT Network (2021) Sunlight exposure exerts immunomodulatory effects to reduce multiple sclerosis severity. *Proc Natl Acad Sci U S A*. 118:e2018457118.

Tangherlini G, Börgel F, Schepmann D, Slocum S, Che T, Wagner S, Schwegmann K, Hermann S, Mykicky N, Loser K, Wunsch B (2020) Synthesis and Pharmacological Evaluation of Fluorinated Quinoxaline-Based κ -Opioid Receptor (KOR) Agonists Designed for PET Studies. *ChemMedChem*. 15:1834-1853.

Weishaupt C, Goerge T, Loser K (2020) Activated melanoma vessels: A sticky point for successful immunotherapy. *Exp Dermatol* 29:1046-1054.

Weishaupt C, Steinert M, Brunner G, Schulze HJ, Fuhlbrigge RC, Goerge T, Loser K (2019) Activation of human vascular endothelium in melanoma metastases induces ICAM-1 and E-selectin expression and results in increased infiltration with effector lymphocytes. *Exp Dermatol* 28:1258-1269.

Klotz L, Eschborn M, Lindner M, Liebmann M, Herold M, Janoschka C, Torres Garrido B, Schulte-Mecklenbeck A, Gross CC, Breuer J, Hundehege P, Posevitz V, Pignolet B, Nebel G, Glander S, Freise N, Austermann J, Wirth T, Campbell GR, Schneider-Hohendorf T, Eveslage M, Brassat D, Schwab N, Loser K, Roth J, Busch KB, Stoll M, Mahad DJ, Meuth SG, Turner T, Bar-Or A, Wiendl H (2019) Teriflunomide treatment for multiple sclerosis modulates T cell mitochondrial respiration with affinity-dependent effects. *Sci Transl Med* 11:eaao5563.

Tangherlini G, Kalinin DV, Schepmann D, Che T, Mykicky N, Ständer S, Loser K, Wunsch B (2019) [Development of Novel Quinoxaline-Based \$\kappa\$ -Opioid Receptor Agonists for the Treatment of Neuroinflammation](#). *J Med Chem* 62:893-907.

Kasper M, Walscheid K, Laffer B, Bauer D, Busch M, Wildschütz L, Wang B, Loser K, Vogl T, Grajewski RS, Langmann T, Heiligenhaus A (2018) [The Phenotype of Monocytes in Anterior Uveitis Depends on the HLA-B27 Status](#). *Front Immunol* 9:1773.

Vogl T, Stratis A, Wixler V, Völler T, Thurainayagam S, Jorch SK, Zenker S, Dreiling A, Chakraborty D, Fröhling M, Paruzel P, Wehmeyer C, Hermann S, Papantonopoulou O, Geyer C, Loser K, Schäfers M, Ludwig S, Stoll M, Leanderson T, Schultze JL, König S, Pap T, Roth J (2018) Autoinhibitory regulation of S100A8/S100A9 alarmin activity locally restricts sterile inflammation. *J Clin Invest* 128:1852-1866.

Breuer J, Loser K, Mykicky N, Wiendl H, Schwab N (2018) Does the environment influence multiple sclerosis pathogenesis via UVB light and/or induction of vitamin D? *J Neuroimmunol* pii: S0165-5728(17)30478-2.

Mykicky N, Klenner L, Baumann C, Auriemma M, Sternemann C, Soeberdt M, Elliott GR, Abels C, Luger TA, Loser K (2017) [The tripeptide KdPT ameliorates ongoing psoriasis-like skin inflammation in murine and human skin](#). *Exp Dermatol* 26:328-334.

- Luger TA, Loser K (2018) [Novel insights into the pathogenesis of psoriasis](#). Clin Immunol 186:43-45.
- Breuer J, Herich S, Schneider-Hohendorf T, Chasan AI, Wettschureck N, Gross CC, Loser K, Zarbock A, Roth J, Klotz L, Wiendl H, Schwab N (2017) [Dual action by fumaric acid esters synergistically reduces adhesion to human endothelium](#). Mult Scler pii: S0165-5728:30478-2.
- Mykicki N, Herrmann AM, Schwab N, Deenen R, Sparwasser T, Limmer A, Wachsmuth L, Klotz L, Köhrer K, Faber C, Wiendl H, Luger TA, Meuth SG, Loser K (2016) [Melanocortin-1 receptor activation is neuroprotective in mouse models of neuroinflammatory disease](#). Sci Transl Med 8:362ra146.
- Leite Dantas R, Masemann D, Schied T, Bergmeier V, Vogl T, Loser K, Brachvogel B, Varga G, Ludwig S, Wixler V (2016) [Macrophage-mediated psoriasis can be suppressed by regulatory T lymphocytes](#). J Pathol 240:366-77.
- Wegner J, Loser K, Apsite G, Nischt R, Eckes B, Krieg T, Werner S, Sorokin L (2016) [Laminin \$\alpha\$ 5 in the keratinocyte basement membrane is required for epidermal-dermal intercommunication](#). Matrix Biol 56:24-41.
- Klenner L, Hafezi W, Clausen BE, Lorentzen EU, Luger TA, Beissert S, Kühn JE, Loser K (2015) [Cutaneous RANK-RANKL Signaling Upregulates CD8-Mediated Antiviral Immunity during Herpes simplex Virus Infection by Preventing Virus-Induced Langerhans Cell Apoptosis](#). J Invest Dermatol 135:2676-87.
- Breuer J, Schwab N, Schneider-Hohendorf T, Marziniak M, Mohan H, Bhatia U, Gross CC, Clausen BE, Weishaupt C, Luger TA, Meuth SG, Loser K*, Wiendl H* (2014) [Ultraviolet B light attenuates the systemic immune response in central nervous system autoimmunity](#). Ann Neurol 75:739-58. * gleichberechtigte Letztautorschaft
- Chen Z, Barbi J, Bu S, Yang HY, Li Z, Gao Y, Jinasena D, Fu J, Lin F, Chen C, Zhang J, Yu N, Li X, Shan Z, Nie J, Gao Z, Tian H, Li Y, Yao Z, Zheng Y, Park BV, Pan Z, Zhang J, Dang E, Li Z, Wang H, Luo W, Li L, Semenza GL, Zheng SG, Loser K, Tsun A, Greene MI, Pardoll DM, Pan F, Li B (2013) [The ubiquitin ligase Stub1 negatively modulates regulatory T cell suppressive activity by promoting degradation of the transcription factor Foxp3](#). Immunity 39:272-85.
- Visekruna A, Ritter J, Scholz T, Campos L, Guralnik A, Poncette L, Raifer H, Hagner S, Garn H, Staudt V, Bopp T, Reuter S, Taube C, Loser K, Huber M (2013) Tc9 cells, a new subset of CD8(+) T cells, support Th2-mediated airway inflammation. Eur J Immunol 43:606-18.
- Petersen B, Wolf M, Austermann J, van Lent P, Foell D, Ahlmann M, Kupas V, Loser K, Sorg C, Roth J, Vogl T (2013) The alarmin Mrp8/14 as regulator of the adaptive immune response during allergic contact dermatitis. EMBO J 32(1):100-11.
- Auriemma M, Brzoska T, Klenner L, Kupas V, Goerge T, Voskort M, Zhao Z, Sparwasser T, Luger TA, Loser K (2012) α -MSH-stimulated tolerogenic dendritic cells induce functional regulatory T cells and ameliorate ongoing skin inflammation. J Invest Dermatol 132:1814-24.
- Loser K, Beissert S (2012) Regulatory T cells: banned cells for decades. J Invest Dermatol 132:864-71.
- Kupas V, Weishaupt C, Siepmann D, Kaserer ML, Eickelmann M, Metze D, Luger TA, Beissert S, Loser K (2011) RANK is expressed in metastatic melanoma and highly upregulated on melanoma-initiating cells. J Invest Dermatol 131:944-55.
- Loser K, Vogl T, Voskort M, Lueken A, Kupas V, Nacken W, Klenner L, Kuhn A, Foell D, Sorokin L, Luger TA, Roth J, Beissert S (2010) The Toll-like receptor 4 ligands Mrp8 and Mrp14 are crucial in the development of autoreactive CD8(+) T cells. Nat Med 16:713-7.

Loser K, Brzoska T, Oji V, Auriemma M, Voskort M, Kupas V, Klenner L, Mensing C, Hauschild A, Beissert S, Luger TA (2010) The neuropeptide alpha-melanocyte-stimulating hormone is critically involved in the development of cytotoxic CD8+ T cells in mice and humans. PLoS One 5:e8958.

Wu C, Ivars F, Anderson P, Hallmann R, Vestweber D, Nilsson P, Robenek H, Tryggvason K, Song J, Korpos E, Loser K, Beissert S, Georges-Labouesse E, Sorokin LM (2009) Endothelial basement membrane laminin alpha5 selectively inhibits T lymphocyte extravasation into the brain. Nat Med 15:519-27.

Loser K, Beissert S (2009) Regulation of cutaneous immunity by the environment: An important role for UV irradiation and vitamin D. Int Immunopharmacol 9:587-89.

Loser K, Sturm A, Voskort M, Kupas V, Balkow S, Auriemma M, Sternemann C, Dignass AU, Luger TA, Beissert S (2009) Galectin-2 suppresses contact allergy by inducing apoptosis in activated CD8+ T cells. J Immunol 182:5419-29.

Balkow S, Krux F, Loser K, Becker JU, Grabbe S, Dittmer U (2007) Friend retrovirus infection of myeloid dendritic cells impairs maturation, prolongs contact to naive T cells, and favors expansion of regulatory T cells. Blood 110:3949-58.

Loser K, Apelt J, Voskort M, Mohaupt M, Balkow S, Schwarz T, Grabbe S, Beissert S (2007) IL-10 controls ultraviolet-induced carcinogenesis in mice. J Immunol 179:365-71.

Reichardt P, Dornbach B, Rong S, Beissert S, Gueler F, Loser K, Gunzer M (2007) Naïve B-cells generate regulatory T-cells in the presence of a mature immunological synapse. Blood 110:1519-29.

Loeser S, Loser K, Bijker MS, Rangachari M, van der Burg SH, Wada T, Beissert S, Melief CJM, Penninger JM (2007) Spontaneous tumor rejection by cbl-b deficient CD8+ T cells. J Exp Med 204:879-91.

Loser K, Mehling A, Loeser S, Apelt J, Kuhn A, Grabbe S, Schwarz T, Penninger JM, Beissert S (2006) Epidermal RANKL controls regulatory T cell numbers via activation of dendritic cells. Nat Med 12:1372-9.

Loser K, Balkow S, Higuchi T, Apelt J, Kuhn A, Luger TA, Beissert S (2006) FK506 controls CD40L-induced systemic autoimmunity in mice. J Invest Dermatol 126:1307-15.

Loser K, Balkow S, Higuchi T, Apelt J, Kuhn A, Luger TA, Beissert S (2006) FK506 controls CD40L-induced systemic autoimmunity in mice. J Invest Dermatol 126:1307-15.

Riemann H*, Loser K*, Beissert S, Fujita M, Schwarz A, Schwarz T, Grabbe S (2005) IL-12 breaks dinitrothiocyanobenzene (DNTB)-mediated tolerance and converts the tolerogen DNTB into an immunogen. J Immunol 175:5866-74. *gleichberechtigte Erstautorschaft

Loser K, Hansen W, Apelt J, Balkow S, Buer J, Beissert S (2005) In vitro-generated regulatory T cells induced by Foxp3-retrovirus infection control murine contact allergy and systemic autoimmunity. Gene Ther 12:1294-304.

Loser K, Scherer A, Krummen MBW, Varga G, Higuchi T, Schwarz T, Sharpe AH, Grabbe S, Bluestone JA, Beissert S (2005) An important role of CD80/CD86-CTLA-4 signaling during photocarcinogenesis in mice. J Immunol 174:5298-305.

Loser K, Mehling A, Apelt J, Ständer S, Andres PG, Reinecker HC, Eing BR, Skryabin BV, Varga G, Schwarz T, Beissert S (2004) Enhanced contact hypersensitivity and antiviral immune responses in vivo by keratinocyte-targeted overexpression of IL-15. Eur J Immunol 34:2022-31.

Bruder D, Probst-Kepper M, Westendorf AM, Geffers R, Beissert S, Loser K, von Boehmer H, Buer J, Hansen W (2004) Neuropilin-1: a surface marker of regulatory T cells. Eur J Immunol 34:623-630.

Müller FU*, Loser K*, Kleideiter U, Neumann J, von Wallbrunn C, Dobner T, Scheld HH, Bantel H, Engels IH, Schulze-Osthoff K, Schmitz W (2004) Transcription factor AP-2alpha triggers apoptosis in cardiac myocytes. Cell Death Differ 11:485-93. ; *gleichberechtigte Erstautorschchaft

Mehling A, Loser K, Varga G, Metze D, Luger TA, Schwarz T, Grabbe S, Beissert S (2001) Overexpression of CD40 ligand in murine epidermis results in chronic skin inflammation and systemic autoimmunity. J Exp Med 194:615-28.