

Hoth, Markus

General Information

Name: Hoth, Markus
Academic title: Prof. Dr. rer. nat.

Gender: Male
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Institute of Biophysics
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Current position/status: Professor



Academic Education and Qualifications

1986-1991 Physics at the University of Göttingen
1991 Diploma in Physics
1993 Doctorate, Dr. rer. nat., under Prof. Dr. Erwin Neher, Max Planck Institute of Biophysical Chemistry, Göttingen

Professional Career

1994-1999 Research associate at Stanford University, Department of Molecular and Cellular Physiology (Prof. Dr. Richard S. Lewis)
1999-2007 University professor (C3) of physiology, University of Saarland
2001 Invitation to be a professor of biomedical sciences, Cornell University – declined
2007 Invitation to be a W3 professor of physiology at Friedrich-Alexander-University, Erlangen-Nuremberg – declined
since 10/2007 University Professor (W3) of biophysics, University of Saarland
2013 Invitation to be a W3 professor of physiology and physics, MH Hannover – declined

Publications (5 most cited publications)

1. Quintana A, Pasche M, Junker C, Al-Ansary D, Rieger H, Kummerow C, Nuñez L, Villalobos C, Meraner P, Becherer U, Rettig J, Niemeyer BA, **Hoth M (2011)**
Calcium microdomains at the immunological synapse: how ORAI channels, mitochondria and calcium pumps generate local calcium signals for efficient T-cell activation
EMBO J 30, 3895-3912
2. Qu B, Pattu V, Junker C, Schwarz EC, Marshall M, Matti U, Becherer U, Bhat S, Kummerow C, Neumann F, Pfreundschuh M, Rieger H, Rettig J, **Hoth M (2011)**
Docking of lytic granules at the immunological synapse in human CTL requires Vti1b-dependent pairing with TCR endosomes
J Immunol 186, 6894-6904

3. Bogeski I, Kummerow C, Al-Ansary D, Schwarz EC, Koehler R, Kozai D, Takahashi N, Peinelt C, Griesemer D, Bozem M, Mori Y, **Hoth M**, Niemeyer BA (2010)
Differential redox regulation of ORAI channels: a mechanism to tune cellular calcium signaling. **Science Signaling** 3:(115), ra24
4. Quintana A, Schwindling C, Wenning AS, Becherer U, Rettig J, Schwarz EC, **Hoth M** (2007)
T cell activation requires mitochondrial translocation to the immunological synapse
PNAS 104, 14418-14423
5. **Hoth M**, Button DC, Lewis RS (2000)
Mitochondria control of calcium-channel gating: a mechanism for sustained signaling and transcriptional activation in T lymphocytes
PNAS 97, 10607-10612