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Editorial Board
Page ii

### Review

Highly multiparametric analysis by mass cytometry  
Olga Ornatsky, Dmitry Bandura, Vladimir Baranov, Mark Nitz, Mitchell A. Winnik, Scott Tanner

### Research Papers

Enhancement of antibody response by high mobility group box protein-1-based DNA immunization  
Ryuichiro Kimura, Ryota Shiibashi, Masanori Suzuki, Yoshihide Hayashizaki, Joe Chiba

A novel impedance-based cellular assay for the detection of anti-calcium channel autoantibodies in type 1 diabetes  
Michael W. Jackson, Tom P. Gordon

Biological variations of MASP-3 and MAp44, two splice products of the MASP1 gene involved in regulation of the complement system  
Sørøen E. Degn, Lisbeth Jensen, Péter Gál, József Dobó, Steffen H. Holmvd, Jens C. Jensenius, Steffen Thiel

### Research Highlights

- MASP-3 and MAp44 are found in serum in high molecular weight complexes.
- MASP-3 levels are log-normally distributed with a median of 5.0 μg/ml (range: 1.8-10.6 μg/ml, N=200).
- MAp44 levels are log-normally distributed with a median of 1.7 μg/ml (range: 0.8-3.2...
µg/ml). ▶ MASP-3 levels are low at birth and reach normal levels within the first 6 months. ▶ MAp44 levels drop slightly during the first 6 months after birth. ▶ Neither MAp44 nor MASP-3 behaves as a classical acute phase protein.

6 ▶ A cell-based luciferase-dependent assay for the quantitative determination of free extracellular adenosine with paracrine signaling activity  
Original Research Article  
Pages 51-56  
Sebastian F.M. Häusler, Monika Ossadnik, Evi Horn, Stefan Heuer, Johannes Dietl, Jörg Wischhusen

Research Highlights

▶ Adenosine is an important, but unstable mediator of immune-modulatory signals  
▶ adenosine signals are transmitted via G-protein coupled adenosine receptors  
▶ activation of the adenosine receptor 2A triggers intracellular cAMP generation  
▶ bioluminescent „reporter“ cells can be used to quantify adenosine via cAMP formation.

7 ▶ Expression of antibody variable region-human alkaline phosphatase fusion proteins in mammalian cells  
Original Research Article  
Pages 57-63  
Yoshiyuki Sasajima, Ryohei Iwasaki, Kouhei Tsumoto, Izumi Kumagai, Masaki Ihara, Hiroshi Ueda

Research Highlights

▶ Fusion proteins of antibody VH or scFv and secreted placental AP (SEAP) were made. ▶ VH-SEAP could detect antigen via immobilized VL fusion protein by AP activity. ▶ scFv-SEAP could detect immobilized antigen. ▶ The effect of linker length on AP activity was investigated.

8 ▶ Immunohistochemical detection of soluble immunoglobulins in living mouse small intestines using an in vivo cryotechnique  
Original Research Article  
Pages 64-74  
Satoshi Shimo, Sei Saitoh, Nobuo Terada, Nobuhiko Ohno, Yurika Saitoh, Shinichi Ohno

9 ▶ Pharmacokinetic immunoassay methods in the presence of soluble target  
Original Research Article
10 Neutrophil activation during transmigration in vivo and in vitro: A translational study using the skin chamber model  Original Research Article
Pages 82-88
Josefin M. Paulsson, Stefan H. Jacobson, Joachim Lundahl

Research Highlights

► The expression of CR3 increased following both in vivo and in vitro transmigration. ► In vivo and in vitro transmigrated neutrophils display different activation status. ► CR1 is mobilized following neutrophil density isolation.

11 Increasing hybridoma viability and antibody repertoire after the cell fusion by the use of human plasma as an alternative supplement  Original Research Article
Pages 89-97
Ren-Jeh Lee, Jiann-Shing Wu, Rong-Huay Juang, Yu-Jen Wu, Ching-Yu Lin, Szu-Yu Wu, Pei-Ru Huang, Chi-Hong Chu, Li-Te Chin, Han-Min Chen

Computational Method

12 Identification of helper T cell master regulator candidates using the polar score method  Original Research Article
Pages 98-109
H.J. van den Ham, L. de Waal, A.C. Andeweg, R.J. de Boer

Technical Note

13 Identification of a novel monoclonal antibody recognizing CD133
Pages 110-115
Suresh Kumar Swaminathan, Michael R. Olin, Colleen L. Forster, Karen S. Santa Cruz, Jayanth Panyam, John R. Ohlfest