

ImmunoTools IT-Box-139 Award 2012



Josephine Labus

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The role of beta 1 integrins in a *in vitro* blood-brain barrier model

In order to study the role of beta 1 integrins at the blood-brain barrier I established an *in vitro* blood-brain barrier model that is characterized by a high transendothelial electrical resistance and a low paracellular permeability coefficient. Interleukin-1 beta induces an inflammatory response in this model indicating that this system is a useful tool to investigate the role of beta1 integrins in inflammatory processes at the blood-brain barrier.

First experiments suggest a role for beta 1 integrins in inflammation induced adhesion and matrix production of endothelial cells. In further investigations it should be clarified whether endothelial beta 1 integrins are also involved in transmigration processes. In this context ImmunoTools antibodies from the IT-Box-139 should be used to analyse the surface receptors on migrated and non-migrated PBMC subpopulation by flow cytometry.

ImmunoTools IT-Box-139 for Josephine Labus include 100 antibodies

FITC - conjugated anti-human CD1a, CD3, CD4, CD5, CD6, CD7, CD8, CD14, CD15, CD16, CD19, CD21, CD25, CD29, CD35, CD36, CD41a, CD42b, CD45, CD45RA, CD45RB, CD45RO, CD49d, CD53, CD57, CD61, CD63, CD80, CD86, HLA-DR, IL-6, Control-IgG1, Control-IgG2a, Control-IgG2b, Annexin V

PE - conjugated anti-human CD3, CD4, CD8, CD11b, CD15, CD14, CD18, CD19, CD20, CD21, CD22, CD31, CD33, CD38, CD40, CD45, CD45RB, CD50, CD52, CD56, CD58, CD62p, CD72, CD95, CD105, CD147, CD177, CD235a, HLA-ABC, IL-6, Control-IgG1, Control-IgG2a, Control-IgG2b, Annexin V

PE/Dy647 -tandem conjugated anti-human CD3, CD4, CD8, CD14, CD19, CD20, CD25, CD54

APC -conjugated anti-human CD2, CD3, CD4, CD8, CD10, CD11a, CD11c, CD14, CD16, CD27, CD37, CD42b, CD44, CD45, CD59, CD62L, CD69, CD71, IL-6, Control-IgG1, Control-IgG2a, Control-IgG2b, Annexin V

[DETAILS](#)