

ImmunoTools IT-Box-139 Award 2012



Christine Schorn

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Mechanisms of crystal-induced inflammation

Gouty arthritis is the most prevalent form of inflammatory arthropathy. It is triggered if uric acid, the final product of human purine metabolism, converts in sodium containing fluids as needle-shaped, pro-inflammatory monosodium urate (MSU) crystals which lead to inflammation in joints and tissues.

In my PhD work I analyse the effect of MSU crystals on human whole blood derived cells. For this purpose, I will analyse the phagocytosis of crystals on different human blood cells. The uptake of MSU can be monitored by the change of the forward scatter and side scatter in cytofluorometry. For the identification of MSU phagocytosing cells in whole blood (neutrophils, basophils, monocytes, B cells, T cells etc.) I would like to use the ImmunoTools antibodies from the IT-Box-139. The antibodies would also be helpful for analysing the purity of isolated cells. Furthermore, I would use the antibodies to test the activation of cells after contact with MSU crystals (e.g. HLA-DR on monocytes). In addition, I will analyse the effect of MSU crystals on platelets and leukocytes by fluorescence microscopy by stainings with FITC- or PE-conjugated antibodies from the IT-Box-139.

ImmunoTools IT-Box-139 for Christine Schorn 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](#)