ImmunoTools IT-Box-139 Award 2012

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Implication of iNKT cells on allergic inflammatory responses

Asthma, a pathology whose prevalence and severity are dramatically increasing worldwide, is a chronic airway inflammation characterized by an airway obstruction and hyperreactivity in response to innocuous environmental antigens. The pathobiology of severe asthma is certainly distinct from milder forms of the disease, but severe asthma is now considered as a heterogeneous pathology potentially implicating distinct immune mechanisms. In fact, invariant Natural Killer T cells, basophils, eosinophils, macrophages, Th1, Th2, Th17 and regulatory T cells contribute to the outcome of asthma. Our hypothesis is that the number, the activation and functional state of those cells could be correlated with distinct pathologies observed in the subgroups of asthmatic patients. To confirm our hypothesis, we will compare the frequency and the functional properties of these cells from peripheral blood of mild-to-moderate asthmatics and of patients with severe controlled and non-controlled disease and associate these parameters with the clinical forms of asthma, in order to establish a panel of biomarkers capable of distinguish asthmatic patients according to their clinic phenotype. These cells will be phenotypically identified by flow cytometry, assessing surface markers such as CD3, CD4, CD8, CD14, CD25, CD45RA, CD45RO, CD71 CD80, CD86, CD235a, HLA-ABC, HLA-DR. Therefore, the antibodies from the IT-Box-139 would be very useful in this important part of our project.

ImmunoTools IT-Box-139 for Renata Belo includes 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