

ImmunoTools IT-Box-139 Award 2012



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EPIGENETIC REGULATION OF FIBROBLAST-MYOFIBROBLAST TRANSITION IN CARDIOVASCULAR DISEASES

Cardiovascular diseases remain the first cause of morbidity and mortality in the developed countries accounting for almost 30% of total deaths. A large number of heart diseases come together to pathological remodeling of the myocardium. Cardiac fibroblast is a major effector in the development of associated fibrotic events that finally culminate in myocardial stiffening and heart failure. A key event in cardiac fibrosis is the acquisition of myofibroblast phenotype secreting large amounts of cytokines and extracellular matrix proteins. Despite its importance in these crucial processes in heart diseases, cardiac fibroblasts are poorly characterized *in vivo*. Many studies have been performed *in vitro*, but it is well known that culture environment triggers fibroblast activation. Therefore, it cannot be considered that cultured fibroblasts are a good model to study what happens in healthy *versus* damaged heart. In order to characterize the pathways leading to myofibroblast differentiation in cardiac disease, we are focused on characterizing fresh cardiac fibroblast by flow cytometry employing discussed markers for different cardiac cells.

It would be very useful for us the ImmunoTools antibodies so that we can conduct a screening to identify and be able to select the different cell types of the heart in health and disease.

ImmunoTools IT-Box-139 for Laura Macri Pellizzeri 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

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