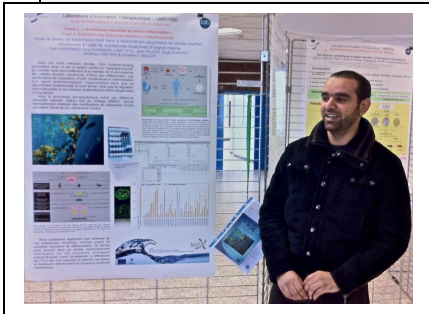


ImmunoTools IT-Box-139 Award 2012



Fathi Emhemmed

PhD Supervisor: Dr. Christian D. Muller

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Study of the Oct4 transcription factor in the selectivity of pro-apoptotic cancer stem cells with bioactive substances of marine origin

In a given cell niche, Oct4 (Octamer-binding transcription factor 4) is a central stem factor that controls self-renewal and maintenance of poorly differentiated multi-stem cancer stem cells (CSCs). Changes in the expression of Oct4, following the administration of a pharmacological agent would assume then that his proteasomal sequestration (short term) and its transcriptional regulation and epigenetic marks are reordered (long term).

The pro-apoptotic process induced by various natural compounds obtained during the MAREX screening program should induce changes in the expression of Oct4 thus helping to study of its mechanism of action. We also suspect that some of our marine bioactive substances are potent inducers of differentiation. The latter could then be particularly interesting because the anticancer strategy are currently differentiate CSCs in order to diminish the potential cancer by eradicating definitely relapsed metastatic process.

The antibodies from the IT box will be used to monitor induced differentiation of our Oct4 bearing cells lines (testis, pancreas) by new marine compounds.

ImmunoTools IT-Box-139 for Fathi Emhemmed 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](#)