

# PeliSPOTä

## human IL-10

### Specification sheet

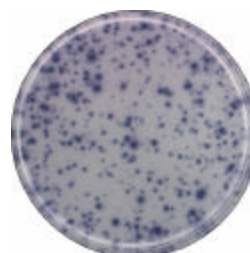
<b>Order number</b>	M9410
<b>Specificity</b>	The monoclonal antibodies of this pair recognize native and recombinant human IL-10
<b>Intended use</b>	<b>For research use only</b>
<b>Application</b>	<p>Interleukin-10 (IL-10), also known as cytokine synthesis inhibitory factor (CSIF) is a member of the IL-10 cytokine family, which further includes IL-19, IL-20, IL-22, IL-24 and IL-26. These family members are more structurally than functionally related. IL-10 is a homodimeric protein of 160 amino acids. Upon activation IL-10 is expressed by CD8+ T-cells, Th1, Th2 and Tr1 CD4+ cells, CD14+ monocytes, activated macrophages, dendritic cells, B-cells and various other cells.</p> <p>IL-10 affects different cells of the immune system. IL-10 inhibits the synthesis of a number of cytokines such as IFN-gamma , IL-2 and TNF-beta in Th1 T-helper subpopulations of T-cells but not of Th2 T-helper cells. This activity is antagonized by IL4. IL-10 also inhibits the expression of cytokines such as IL-1, GM-CSF, TNF, IL-6, IL-8, IL-10 and IL-12 by activated macrophages and it leads to an inhibition of antigen presentation. The observation of high production levels of IL-10 in T regulatory cells supports the idea of IL-10 as a general immune suppressor. Nevertheless, IL-10 has also been shown to have up-regulating capacities, including the induction of differentiation and proliferation of activated B-cells and in the presence of TGF-beta secretion of IgG and IGA is also reported. Furthurmore, IL-10 supports the growth of mast cell lines and the induction of class II MHC antigen expression on B-cells .</p> <p>This PeliSPOT™ human IL-10 pair has been developed for reproducible and specific enumeration of human IL-10 secreting cells.</p>
<b>Assay procedure</b>	<p>See PeliSPOT™ product information</p> <p><b>WHEN USING PBMC DO NOT ACTIVATE THE MEMBRANE WITH ETHANOL</b></p> <p>Prewet membrane with 100 µl PBS and empty plate before coating</p>
<b>Storage and stability</b>	As indicated on the box label
<b>Cell incubation</b>	Optimal conditions should be determined by the researcher. A typical incubation period is 18-24 hours.
<b>Positive secretion control</b>	Polyclonal cell activation with PHA (1 µg/ml) is recommended.
<b>Spot counting</b>	Enumeration of spots is preferably done with the A.EL.VIS spot analysers, Eli.Scan or Eli.Expert.

Recommended parameter settings for software version V3.3 and up:			
ROI	= 70%	Invert	= off
Brightness	= 65%	Slope	= N
MinSize	= 3	Development	= N
MaxSize	= 500	Separation	= 50
Minintensity	= 10	Pollution	= On
MinCircularity	= 100	Overdevelop	= On

#### Typical results after 20 hours incubation



50,000 PBMC per well, non-stimulated



50,000 PBMC per well, PHA stimulated