

PeliSPOTä

human IL-4

Order number	M2514 kit and M9414 pair
Specificity	The monoclonal antibodies in this kit/ pair recognize native and recombinant human IL-4
Intended use	For research use only
Application	<p>Interleukin 4 (IL-4, B-cell growth factor-1, BSF-1) is a T-cell derived cytokine with a molecular weight of approximately 15 to 19 kD. It plays an important role in the activation of resting B-cells and the subsequent proliferation and differentiation of B-cells.</p> <p>IL-4 is essential for IgE synthesis in vitro and its involvement in allergic diseases has been demonstrated. Furthermore, IL-4 was found to inhibit the secretion of IL-1β, TNF-α and IL-6 of human monocytes, to down-regulate the surface expression of CD5 on B-cells and to promote the growth of human T-cells. Also anti-inflammatory effects of IL-4 have been reported. Several studies have been conducted to assess the role of IL-4 in several autoimmune diseases.</p> <p>This PeliSPOT™ human IL-4 kit has been developed for reproducible and specific enumeration of human IL-4 secreting cells.</p>
Assay procedure	See PeliSPOT™ Assay Procedure (kit) or PeliSPOT Pair product information
Storage and stability	As indicated on the box label
Cell incubation	<p>Optimal conditions should be determined by the researcher. A typical incubation period for antigen specific stimulation is 44 hours.</p> <p>For a stronger stimulation (e.g. pma/iono) 20 hours stimulation is sufficient.</p>
Positive assay control	Dilute 1:100 in cell culture medium (kit only)
Positive secretion control	Polyclonal cell activation with PMA and Ionomycin is recommended. Concentrations are indicated in the PeliSPOT™ assay protocol.
Spot counting	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	=	X Low
MinSize	=	5	Development	=	N
MaxSize	=	500	Separation	=	20
Minintensity	=	10	Pollution	=	On
MinCircularity	=	100	Overdevelop	=	On

**Typical results after
20 hours incubation**



100,000 PBMC per well non- stimulated 25,000 PBMC per well, pma/iono stimulated