

Store at  
-20C  
#12227**IL-4 (D19A10) Rabbit mAb**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, FC-FP	H	Endogenous	17	Rabbit IgG	#P05112	3565

**Product Usage Information****Application**

Western Blotting  
Flow Cytometry (Fixed/Permeabilized)

**Dilution**

1:1000  
1:800

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

IL-4 (D19A10) Rabbit mAb recognizes endogenous levels of total IL-4 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with recombinant human IL-4 protein.

**Background**

Interleukin-4 (IL-4) is a cytokine secreted by activated T cells, basophils, and mast cells (1,2). While it contributes to many immunomodulatory responses, it is mainly recognized as the cytokine responsible for eliciting differentiation of naive T cells into Th2 lineage cells that are defined by their secretion of IL-4, IL-5, and IL-10 (3). In addition, IL-4 contributes to immunoglobulin class switching by inducing the production of IgE from B cells (4,5). IL-4 acts through the IL-4 receptor, leading to tyrosine phosphorylation and activation of the Stat6 transcription factor (6).

**Background References**

1. Yokota, T. et al. (1986) *Proc Natl Acad Sci USA* 83, 5894-8.
2. Grabstein, K. et al. (1986) *J Exp Med* 163, 1405-14.
3. Kopf, M. et al. (1993) *Nature* 362, 245-8.
4. Kotowicz, K. and Callard, R.E. (1993) *Eur J Immunol* 23, 2250-6.
5. Thyphronitis, G. et al. (1989) *Proc Natl Acad Sci USA* 86, 5580-4.
6. Hou, J. et al. (1994) *Science* 265, 1701-6.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

**Cross-Reactivity Key**

**H:** Human

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