10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-IL-4-AcalephFluor647-labled

Catalog # AP101646

Product Information

Application	FC, IF/IC
Primary Accession	P07750
Reactivity	Mouse
Clonality	Monoclonal
Calculated MW	15834

Additional Information

Gene ID	16189
Other Names	Interleukin-4; IL-4; B-cell stimulatory factor 1; BSF-1; Binetrakin; Lymphocyte stimulatory factor 1; Pitrakinra
Target/Specificity	Recognizes mouse IL-4
Dilution	FC~~1:10~50 IF/IC~~N/A
Format	Rat IgG1 kappa. Liquid in PBS, pH 7.3, 0.2% BSA, and 0.02% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	Il4
Synonyms	Il-4
Function	Cytokine secreted primarily by mast cells, T-cells, eosinophils, and basophils that plays a role in regulating antibody production, hematopoiesis and inflammation, and the development of effector T-cell responses (PubMed:3083412). Induces the expression of class II MHC molecules on resting B-cells (PubMed:3498301). Enhances both secretion and cell surface expression of IgE and IgG1 (PubMed:3498301). Also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes (By similarity). Positively regulates IL31RA expression in macrophages. Stimulates autophagy in dendritic cells by interfering with mTORC1 signaling and through the induction of RUFY4 (PubMed:26416964). In addition, plays a critical role in higher functions of the normal brain, such as memory and learning (PubMed:25772794, PubMed:28202615). Upon binding to IL4, IL4R receptor dimerizes either with the common IL2R gamma chain/IL2RG to produce the type 1 signaling complex, located mainly on hematopoietic cells, or with the IL13RA1 to produce the type 2 complex, which is also expressed on nonhematopoietic cells. Engagement of both types

	of receptors initiates JAK3 and to a lower extend JAK1 phosphorylation leading to activation of the signal transducer and activator of transcription 6/STAT6 (PubMed:25847241, PubMed:8624821).
Cellular Location	Secreted.

Background

AcalephFluor647-labled rat monoclonal antibody to IL-4

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.