

ARG23984 anti-IL4 antibody [SQab20176] (PF488P)

Package: 50 µg
Store at: -20°C

Summary

Product Description	PF488P-conjugated Rat Monoclonal antibody [SQab20176] recognizes IL4
Tested Reactivity	Hu, NHuPrm
Tested Application	FACS
Specificity	This antibody cross-reacts with IL4 from non-human primates.
Host	Rat
Clonality	Monoclonal
Clone	SQab20176
Isotype	IgG1
Target Name	IL4
Antigen Species	Human
Immunogen	Recombinant Human IL4.
Conjugation	PF488P
Conjugation Note	PF488P dye is excited by the blue laser (488 nm). The excitation max is 490 nm and the emission max is 516 nm. (Note: PF488P dye is similar as FITC, FITC excited by the blue laser (488 nm). The excitation max is 490 nm and the emission max is 525 nm)
Alternate Names	BSF-1; IL-4; B-cell stimulatory factor 1; BCGF1; Lymphocyte stimulatory factor 1; BCGF-1; Interleukin-4; Pitrakinra; Binetrakin; BSF1

Application Instructions

Application table	<table><thead><tr><th>Application</th><th>Dilution</th></tr></thead><tbody><tr><td>FACS</td><td>5 µl/10⁶ cells</td></tr></tbody></table>	Application	Dilution	FACS	5 µl/10 ⁶ cells
Application	Dilution				
FACS	5 µl/10 ⁶ cells				
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.				
Calculated Mw	17 kDa				

Properties

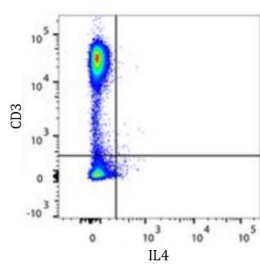
Form	Liquid
Purification	Purification with Protein G.
Purification Note	0.2 µm filter sterilized.
Buffer	PBS, 0.09% Sodium azide and 0.2% BSA.
Preservative	0.09% Sodium azide
Stabilizer	0.2% BSA

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

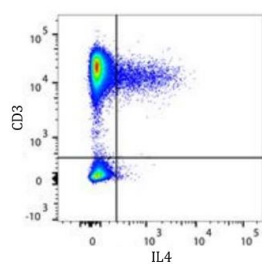
Bioinformation

Gene Symbol	IL4
Gene Full Name	interleukin 4
Background	The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]
Function	Participates in at least several B-cell activation processes as well as of other cell types (PubMed:3016727). It is a costimulator of DNA-synthesis. It induces the expression of class II MHC molecules on resting B-cells. It enhances both secretion and cell surface expression of IgE and IgG1. It also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Positively regulates IL31RA expression in macrophages (By similarity). Stimulates autophagy in dendritic cells by interfering with mTORC1 signaling and through the induction of RUFY4 (By similarity). [UniProt]
Cellular Localization	Secreted. [UniProt]

Images



Human PBMCs control



Human PBMCs +
PMA/ionomycin and Brefeldin A

ARG23984 anti-IL4 antibody [SQab20176] (PF488P) FACS image

Flow Cytometry: Human PBMCs were stimulated for 16 hours in the presence of PMA/ionomycin and Brefeldin A. Cells were stained with anti-CD3 antibody, fixed and permeabilized using 4% paraformaldehyde and saponin, and further stained with ARG23984 anti-IL4 antibody [SQab20176] (PF488P) (right panel). Non-stimulated cells shown as reference (left panel).