## Interleukin 4 / IL4 Monoclonal Mouse Antibody (IL4/1597)



## **Product Description**

Interleukin-4 (IL-4), also designated B cell stimulatory factor-1, is a glycosylated cytokine secreted by activated T lymphocytes, basophils and mast cells. The secreted IL-4 protein promotes the growth and differentiation of cells that participate in immune defense by favoring such events as the expansion of the Th2 lineage relative to Th1 cells. These T helper cell subsets are defined by their pattern of cytokine secretion: Th1 cells secrete IL-2, TNF, while Th2 cells secrete IL-4, IL-5 and IL-10. Another key immunological function of IL-4 is to induce immunoglobulin class switching. IL-4 has been shown to induce the production of IgE and enhance IgG4 secretion by B cells, but suppress the production of IgM, IgA, IgG1, IgG2 and IgG3. It has been determined that Stat6 is rapidly tyrosine phosphorylated following stimulation of IL-3 or IL-4, but is not detectably phosphorylated following stimulation with IL-2, IL-12 or erythropoietin.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1597, Anti-IL-4, |Interleukin 4 (IL4/1597)

## Product attributes

Product attributes				
Antibody number	#1597			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Antibody reactivity (target)	IL-4 ,, Interleukin 4			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	IL4/1597			
Isotype	IgG2b, kappa			
Molecular weight	18 kDa			
Synonyms	B cell growth factor 1; B cell IgG differentiation factor; B Cell Stimulatory Factor 1; BCGF1; Binetrakin; BSF1; IGG1 induction factor; Il4e12; Interleukin 4 variant 2; Interleukin 4; isoform 1Lymphocyte stimulatory factor 1; MGC79402; Pitrakinra			
Human gene symbol	HIL41			
Entrez gene ID	3565			
SwissProt	P05112			
Unigene	73917			
Immunogen	Recombinant full-length human IL-4 protein			
Antibody target cellular localization	Secreted (extracellular)			
Species reactivity	Human			
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry			
Positive control	Spleen.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide			
Cell/tissue expression	Basophils, Mast cells, T-cells			
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.			

Call us: 800-304-5357 Email: techsupport@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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This datasheet was generated on October 30, 2025 at 08:51:20 AM. Visit product page to check for updated information before use. Product link: <a href="https://biotium.com/product/interleukin-4-il4-monoclonal-mouse-antibody-il4-1597/">https://biotium.com/product/interleukin-4-il4-monoclonal-mouse-antibody-il4-1597/</a>