Anti-IL-4 Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P106189

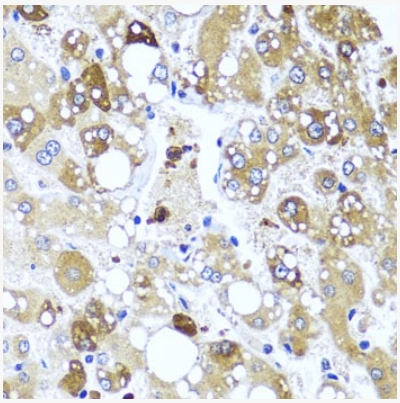
Product Information

Application	WB, IHC-P/IF (Tissue-P), ELISA
Reactivity	Human
Dilution	WB 1:500~1:2000; IF 1:50~1:200; IHC-P 1:50~1:100
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 25-153 of human IL4 (NP_000580.1).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-IL-4 Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

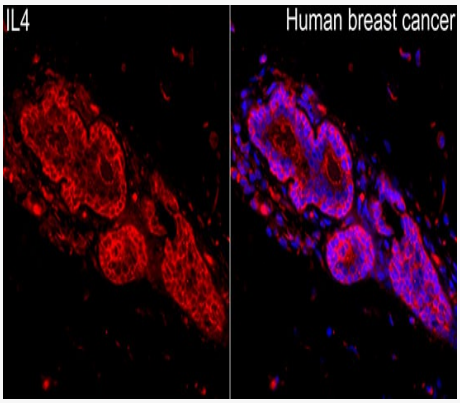
Protein Information

Synonyms	BSF1; IL-4; BCGF1; BSF-1; BCGF-1; IL4.
Calculated MW	Calculated MW: 17 kDa; Observed MW: 20 kDa
Uniprot ID	P05112
Gene ID	3565
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. IL4 is considered an important cytokine for tissue repair, counterbalancing the effects of proinflammatory type 1 cytokines, however, it also promotes allergic airway inflammation. Moreover, IL-4, a type 2 cytokine, mediates and regulates a variety of human host responses such as allergic, anti-parasitic, wound healing, and acute inflammation. This cytokine has been reported to promote resolution of neutrophil-mediated acute lung injury. In an allergic response, IL-4 has an essential role in the production of allergen-specific immunoglobin (Ig) E. This pro-inflammatory cytokine has been observed to be increased in COVID-19 (Coronavirus disease 2019) patients, but is not necessarily associated with severe COVID-19 pathology. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

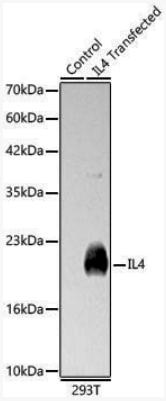
Validation Images



Immunohistochemistry analysis of paraffin-embedded Human liver damage using IL4 Rabbit pAb (P106189) at dilution of 1:100 (40× lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunofluorescence analysis of paraffin-embedded Human breast cancer tissue using IL4 Rabbit pAb (P106189) at a dilution of 1:100 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining. Perform high pressure antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.



Western blot analysis of lysates from wild type (WT) and 293T cells transfected with IL4 using IL4 Rabbit pAb (P106189) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 0.5s.