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

IL12A Rabbit pAb

IL12A Rabbit pAb
Catalog # AP52181

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P29459
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24874
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IL-12
Epitope Specificity	51-150/219
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	bs-0767P is one synthetic peptide derived from mouse IL-12. IL-12 protein is a cytokine produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. This cytokine can block NF-kappa B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract.

Additional Information

Gene ID	3592
Other Names	Interleukin-12 subunit alpha, IL-12A, Cytotoxic lymphocyte maturation factor 35 kDa subunit, CLMF p35, IL-12 subunit p35, NK cell stimulatory factor chain 1, NKSF1, IL12A, NKSF1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	IL12A
Synonyms	NKSF1
Function	Heterodimerizes with IL12B to form the IL-12 cytokine or with EBI3/IL27B to form the IL-35 cytokine (PubMed:8605935, PubMed:8943050). IL-12 is primarily produced by professional antigen-presenting cells (APCs) such as B-cells and dendritic cells (DCs) as well as macrophages and granulocytes and regulates T-cell and natural killer-cell responses, induces the production of interferon-gamma (IFN-gamma), favors the differentiation of T-helper 1 (Th1) cells and is an important link between innate resistance and adaptive immunity (PubMed:1673147, PubMed:1674604, PubMed:8605935). Mechanistically, exerts its biological effects through a receptor composed of IL12R1 and IL12R2 subunits (PubMed:8943050). Binding to the receptor results in the rapid tyrosine phosphorylation of a number of cellular substrates including the JAK family kinases TYK2 and JAK2 (PubMed:7528775). In turn, recruited STAT4 gets phosphorylated and translocates to the nucleus where it regulates cytokine/growth factor responsive genes (PubMed:7638186). As part of IL-35, plays essential roles in maintaining the immune homeostasis of the liver microenvironment and also functions as an immune-suppressive cytokine (By similarity). Mediates biological events through unconventional receptors composed of IL12RB2 and gp130/IL6ST heterodimers or homodimers (PubMed:22306691). Signaling requires the transcription factors STAT1 and STAT4, which form a unique heterodimer that binds to distinct DNA sites (PubMed:22306691).
Cellular Location	Secreted

Background

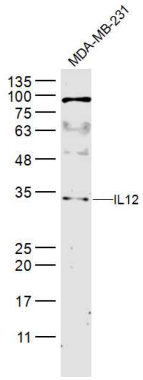
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

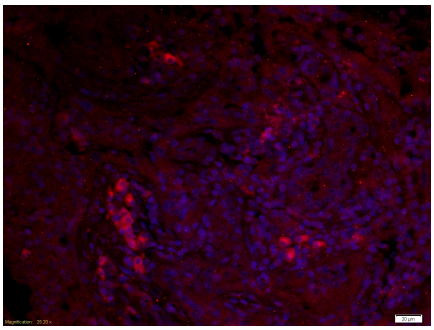
References

Wolf S.F.,et al.J. Immunol. 146:3074-3081(1991).
Gubler U.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:4143-4147(1991).
Muzny D.M.,et al.Nature 440:1194-1198(2006).
Stern A.S.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:6808-6812(1990).
Merberg D.M.,et al.Immunol. Today 13:77-78(1992).

Images

Sample:
MDA-MB-231(Human) Cell Lysate at 40 ug
Primary: Anti-IL12 (AP52181) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 23 kD
Observed band size: 34 kD





Tissue/cell: human lung carcinoma;4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37∩ for 20 min;
Incubation: Anti-IL12 Polyclonal Antibody, Unconjugated(AP52181) 1:500, overnight at 4∑C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(AP52181-Cy3)used at 1:200 dilution for 40 minutes at 37∑C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei

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