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Datasheet for 600-401-AY6

EBI3 Antibody

Overview

Description:	Anti-EBI3 (RABBIT) Antibody - 600-401-AY6
Item No.:	600-401-AY6
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	EBI3 is a subunit in two distinct heterodimeric cytokines: interleukin-27 (IL-27) and IL-35. Like interleukin-23 (IL-23), IL-27 is a recently discovered member of the IL-6/IL-12 family of proinflammatory and immunoregulatory cytokines. It exists as a heterodimer composed of the p40-related protein EBI3 and an IL-12 p35-related protein termed p28. IL-27 is produced after activation by antigen-presenting cells and induces proliferation of naïve but not memory CD4+ T-cells. It acts by binding to its receptor WSX-1 (also known as TCCR) and gp130 which results in the activation of a Jak/STAT signaling cascade, suggesting the IL-27 is involved in the regulation of immune processes. It has been suggested that IL-27 can also be used as a therapeutic agent against cancer as it can also induce tumor-specific anti-tumor activity mediated through CD8+ T-cells, IFN-gamma, and T-bet. IL-35 is composed of EBI3 and the p35 subunit of IL-12 and has been reported to have therapeutic effects against collagen-induced arthritis by expanding the population of regulatory T cells and suppressing Th17 cells. At least two isoform of EBI3 are known to exist.
Synonyms:	EBI3 Antibody, IL27B, IL-27B, IL27B, Interleukin-27 subunit beta, Epstein-Barr virus-induced gene 3 protein, IL-27 subunit beta
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	EBI3

Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-EBI3 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the internal region of human EBI3.
Purity/Specificity:	Anti-EBI3 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with EBI3 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q14213 • GeneID - 10148 • NCBI - NP_005746

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-EBI3 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 25 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	2 µg/mL

Formulation

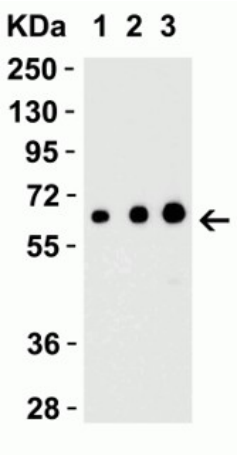
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

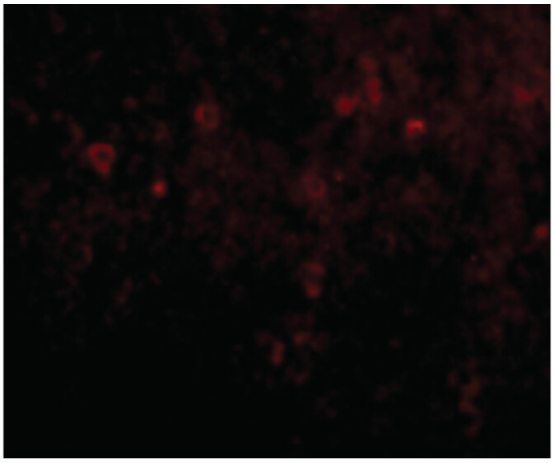
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

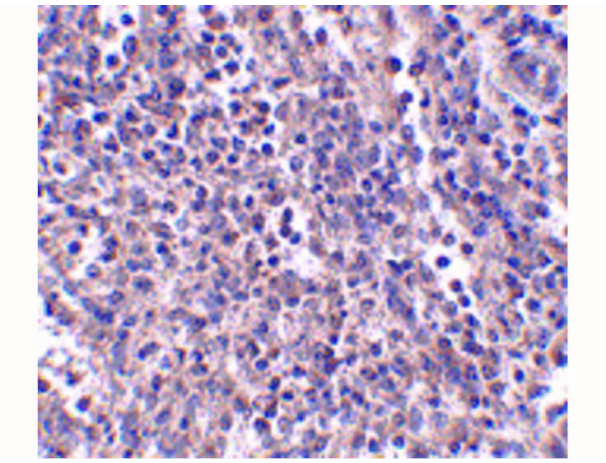
Images



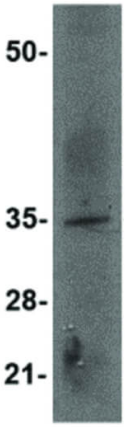
Western Blot
Western Blot using EBI3. Loading: 30 ng of human recombinant IL-17 (IL-17A+IL-17B) protein per lane. Lane 1: 0.5 µg/mL, Lane 2: 1 µg/mL, Lane 3: 2 µg/mL. Antibodies: EBI-3, 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of EBI3 antibody. Tissue: Human spleen cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: EBI3 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: EBI3 as a red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of EBI3 antibody. Tissue: Human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: EBI3 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: EBI3 is nuclear and occasionally cytoplasmic. Staining: EBI3 as a precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot
Western Blot of EBI3 antibody. Lane A: Rat spleen tissue lysate at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 25.3 kDa, ~35 kDa for EBI3.

Disclaimer

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