

Datasheet for 600-401-AY5**EBI3 Antibody****Overview**

Description:	Anti-EBI3 (RABBIT) Antibody - 600-401-AY5
Item No.:	600-401-AY5
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
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
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Reactivity:	Human, Mouse
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 C-terminus 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 • GenelD - 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:	1:10,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1 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

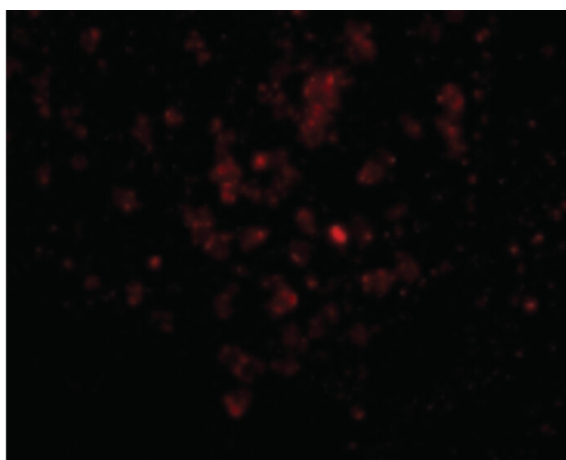
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

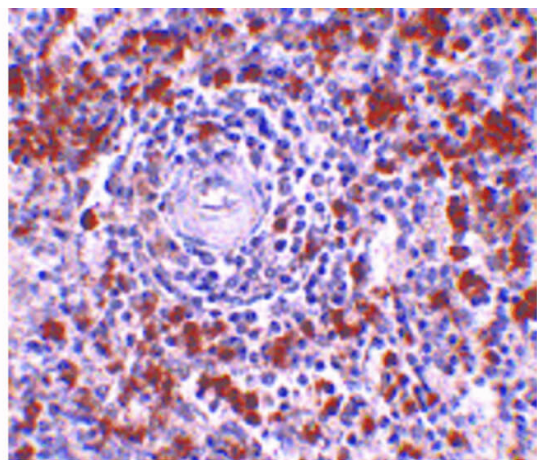
Expiration: Expiration date is one (1) year from date of receipt.

Images



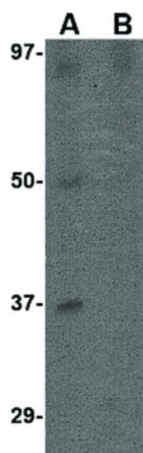
Immunofluorescence Microscopy

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: EBI 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: K562 lysate at 1 μ g/mL in the absence of blocking peptide. Lane B: K562 lysate at 1 μ g/mL in the presence of blocking peptide. Load: 35 μ g 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, ~37 kDa for EBI3.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.