

Datasheet for 600-401-870**Sts-1 Antibody****Overview**

Description:	Anti-Sts-1 (RABBIT) Antibody - 600-401-870
Item No.:	600-401-870
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Sts-1 is a protein that inhibits endocytosis of epidermal growth factor receptor (EGFR) and platelet-derived growth factor receptor. Sts-1 and Sts-2 (formerly p70 and Clip4, respectively) have been found to interact with Cbl, an ubiquitin ligase that plays a critical role in attenuation of receptor tyrosine kinase signaling by inducing ubiquitination and promoting their sorting for endosomal degradation. Sts-1 and Sts-2 contain SH3 domains that interact with Cbl, Ub-associated domains, which bind directly to mono-Ub or to the EGFR/Ub chimera, as well as phosphoglycerate mutase domains that mediate oligomerization of Sts-1/2. Sts-1 and Sts-2 also have been found to negatively regulate signaling pathways that control T cell receptors, which in turn affect the extent and duration of the T cell response to foreign pathogens.
Synonyms:	rabbit anti-Sts-1 antibody, Sts1, Sts 1, Ubiquitin-associated and SH3 domain-containing protein B, Cbl interacting protein p70 antibody, Suppressor of T-cell receptor signaling 1, T-cell ubiquitin ligand 2, TULA-2, Tyrosine-protein phosphatase STS1/TULA2, Ubash3B
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	UBASH3B
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-terminus of mouse Sts-1.
Purity/Specificity:	This affinity purified antibody is directed against mouse Sts-1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from mouse, human, rat and dog based on 100% homology for the immunogen sequence. Cross reactivity with Sts-1 homologues from other sources has not been determined.
Relevant Links:	• UniProtKB - Q8TF42 • NCBI - 24497612 • GeneID - 84959

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA, IHC, and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
IF:	User Optimized
IHC:	4µg/ml
WB:	1:500 - 1:3,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.95 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

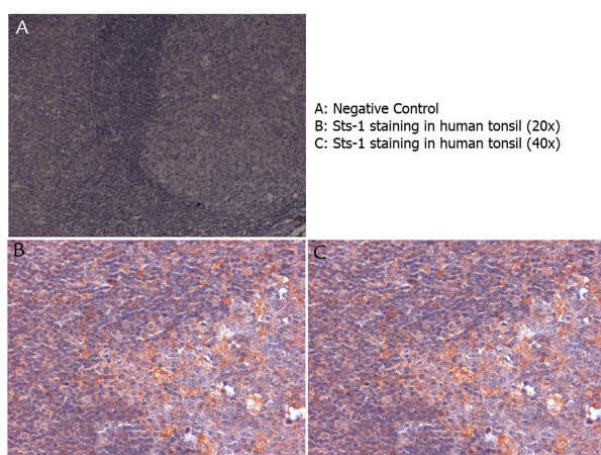
Shipping & Handling

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



Immunohistochemistry

Immunohistochemistry with anti-Sts-1 antibody showing Sts-1 staining of histiocytic elements in cytoplasm of human tonsil at 20x and 40x (B & C). Formalin fixed/paraffin embedded sections were subjected to heat induced epitope retrieval (HIER) at pH 6.2 and then incubated with rabbit anti-Sts-1 antibody at 4.0 µg/ml for 60 minutes. The reaction was developed using MACH 1 universal HRP polymer detection system and visualized with 3'3-diaminobenzidine substrate (DAB).

Western Blot

Western blot using Rockland's Affinity Purified anti-Sts-1 antibody shows detection of a band ~70 kDa corresponding to mouse Sts-1. Approximately 1.0 µg of recombinant (truncated) Sts-1-GST was separated by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 0.3 µg/ml overnight at 4° C followed by washes and reaction with a 1:10,000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] MX (611-132-122). IRDye800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.



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.