

Anti-Sts-1 (RABBIT) Antibody

Sts-1 Antibody Catalog # ASR5306

Specification

Anti-Sts-1 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated

Target Species Mouse

Reactivity
Clonality
Application

Human, Mouse
Polyclonal
WB, IHC, E, I, LCI

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 Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

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.

Preservative 0.01% (w/v) Sodium Azide

Anti-Sts-1 (RABBIT) Antibody - Additional Information

Gene ID 84959

Physical State

Other Names 84959

Purity

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.

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.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.



Anti-Sts-1 (RABBIT) Antibody - Protein Information

Name UBASH3B

Synonyms KIAA1959, STS1

Function

Interferes with CBL-mediated down-regulation and degradation of receptor-type tyrosine kinases. Promotes accumulation of activated target receptors, such as T-cell receptors and EGFR, on the cell surface. Exhibits tyrosine phosphatase activity toward several substrates including EGFR, FAK, SYK, and ZAP70. Down-regulates proteins that are dually modified by both protein tyrosine phosphorylation and ubiquitination.

Cellular Location

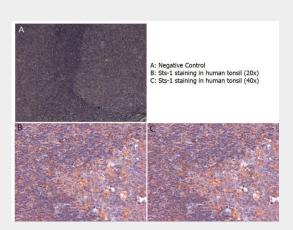
Cytoplasm. Nucleus.

Anti-Sts-1 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

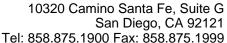
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

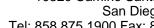
Anti-Sts-1 (RABBIT) Antibody - Images



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 μ g/ml for 60 minutes. The reaction was developed using MACH 1 universal HRP polymer detection system and visualized with 3'3-diamino-benzidine substrate (DAB).

Anti-Sts-1 (RABBIT) Antibody - 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.