

Datasheet for 600-401-EV8**STEAP3 Antibody****Overview**

Description:	Anti-STEAP3 (RABBIT) Antibody - 600-401-EV8
Item No.:	600-401-EV8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The six-transmembrane epithelial antigen of prostate 3 (STEAP3) is a member of a family of metalloreductases identified as cell-surface antigens in prostate tissue. Similar to two other members of the STEAP family (STEAP 2 and STEAP4), STEAP3 promotes both iron and copper reduction. STEAP3 is highly expressed in hematopoietic tissues and colocalizes with the transferrin endosome. Overexpression of STEAP3 stimulates iron reduction; mice lacking STEAP3 are deficient in erythroid ferrireductase activity, suggesting that STEAP3 is an endosomal ferrireductase required for transferrin-dependent iron uptake in erythroid cells.
Synonyms:	STEAP3 Antibody, STMP3, TSAP6, AHMIO2, dudlin-2, Metalloredutase STEAP3, Dudulin-2, hTSAP6
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	STEAP3
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-STEAP3 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide from near the N-terminus of human STEAP3.

Purity/Specificity: Anti-STEAP3 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. This STEAP3 antibody does not cross-react with other STEAP proteins.

Relevant Links:

- [UniProtKB - Q658P3](#)
- [GeneID - 55240](#)
- [NCBI - NP_001008410.1](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-STEAP3 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 55 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 - 1:20,000

IF: 20 µg/mL

IHC: 2.5 µg/mL

WB: 1-2 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1.0 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

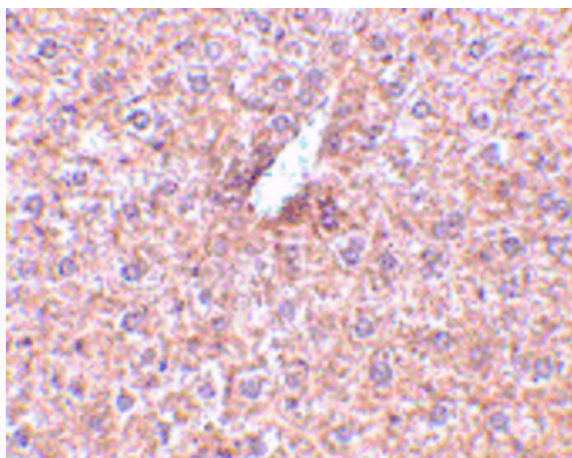
Shipping & Handling

Shipping Condition: Dry Ice

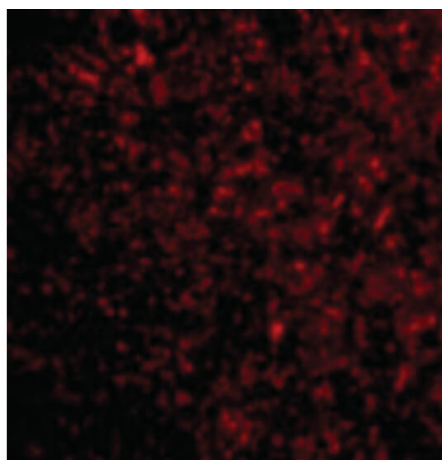
Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted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

Expiration:

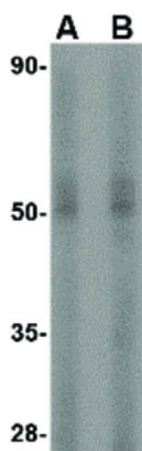
Expiration date is one (1) year from date of receipt.

Images**Immunohistochemistry**

Immunohistochemistry of STEAP3 antibody. Tissue: Mouse liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: STEAP3 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: STEAP3 is nuclear and occasionally cytoplasmic. Staining: STEAP3 as precipitated red signal with hematoxylin purple nuclear counterstain.

**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of STEAP3 antibody. Tissue: Mouse liver cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: STEAP3 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: STEAP3 as a red fluorescent signal.

**Western Blot**

Western Blot of STEAP3 antibody. Lane A: Rat liver tissue lysate at 1 µg/mL. Lane B: Rat liver 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: 39.8 kDa, ~50 kDa for STEAP3.

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.