

#### TPSAB1 / Mast Cell Tryptase Antibody (clone AA1) Mouse Monoclonal Antibody Catalog # ALS12226

## Specification

# TPSAB1 / Mast Cell Tryptase Antibody (clone AA1) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, E, IHC-F <u>O15661</u> Human, Rat, Monkey, Dog, Cat Mouse Monoclonal 31kDa KDa WB~~1:1000 IHC-P~~N/A E~~N/A IHC-F~~N/A

# TPSAB1 / Mast Cell Tryptase Antibody (clone AA1) - Additional Information

Gene ID 7177

**Other Names** Tryptase alpha/beta-1, Tryptase-1, 3.4.21.59, Tryptase I, Tryptase alpha-1, TPSAB1, TPS1, TPS2, TPSB1

Target/Specificity

Recognizes human mast cell tryptase, both alpha and beta isoforms. Is an excellent marker for mast cells, and does not bind to any other cell type in immunohistology.

Reconstitution & Storage

+4°C or -20°C, Avoid repeated freezing and thawing. Store undiluted.

**Precautions** TPSAB1 / Mast Cell Tryptase Antibody (clone AA1) is for research use only and not for use in diagnostic or therapeutic procedures.

## **TPSAB1** / Mast Cell Tryptase Antibody (clone AA1) - Protein Information

Name TPSAB1

Synonyms TPS1, TPS2, TPSB1

#### Function

Tryptase is the major neutral protease present in mast cells and is secreted upon the coupled activation-degranulation response of this cell type. May play a role in innate immunity. Isoform 2 cleaves large substrates, such as fibronectin, more efficiently than isoform 1, but seems less efficient toward small substrates (PubMed:<a href="http://www.uniprot.org/citations/18854315">http://www.uniprot.org/citations/18854315</a>).



## **Cellular Location**

Secreted. Note=Released from the secretory granules upon mast cell activation.

#### **Tissue Location**

Isoform 1 and isoform 2 are expressed in lung, stomach, spleen, heart and skin; in these tissues, isoform 1 is predominant. Isoform 2 is expressed in aorta, spleen, and breast tumor, with highest levels in the endothelial cells of some blood vessels surrounding the aorta, as well as those surrounding the tumor and low levels, if any, in mast cells (at protein level)

# **TPSAB1 / Mast Cell Tryptase Antibody (clone AA1) - Protocols**

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

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

## TPSAB1 / Mast Cell Tryptase Antibody (clone AA1) - Images



Anti-TPSAB1 / Mast Cell Tryptase antibody IHC of human breast, mast cells.

#### TPSAB1 / Mast Cell Tryptase Antibody (clone AA1) - Background

Tryptase is the major neutral protease present in mast cells and is secreted upon the coupled activation-degranulation response of this cell type.

## **TPSAB1** / Mast Cell Tryptase Antibody (clone AA1) - References

Miller J.S., et al.J. Clin. Invest. 84:1188-1195(1989). Schwartz L.B., et al.Submitted (MAR-1990) to the EMBL/GenBank/DDBJ databases. Vanderslice P., et al.Proc. Natl. Acad. Sci. U.S.A. 87:3811-3815(1990). Pallaoro M., et al.J. Biol. Chem. 274:3355-3362(1999). Wang H.W., et al.Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.