

HAT Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP6510c

Specification

HAT Antibody (Center) Blocking Peptide - Product Information

Primary Accession

060235

HAT Antibody (Center) Blocking Peptide - Additional Information

Gene ID 9407

Other Names

Transmembrane protease serine 11D, 3421-, Airway trypsin-like protease, Transmembrane protease serine 11D non-catalytic chain, Transmembrane protease serine 11D catalytic chain, TMPRSS11D, HAT

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6510c was selected from the Center region of human HAT. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HAT Antibody (Center) Blocking Peptide - Protein Information

Name TMPRSS11D

Synonyms HAT

Function

May play some biological role in the host defense system on the mucous membrane independently of or in cooperation with other substances in airway mucous or bronchial secretions. Plays a role in the proteolytic processing of ACE2. Proteolytically cleaves and activates the human coronavirus 229E (HCoV-229E) spike glycoprotein which facilitate virus-cell membrane fusions; spike proteins are synthesized and maintained in precursor intermediate folding states and proteolysis permits the refolding and energy release required to create stable virus-cell linkages and membrane coalescence. Preferentially cleaves the C-terminal side of arginine residues at the P1 position of certain peptides, cleaving Boc-Phe-Ser-Arg-4-methylcoumaryl-7-amide most efficiently and having



an optimum pH of 8.6 with this substrate.

Cellular Location

Cell membrane; Single-pass type II membrane protein. Note=Activated by cleavage and secreted

Tissue Location

Located in the cells of the submucosal serous glands of the bronchi and trachea

HAT Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

HAT Antibody (Center) Blocking Peptide - Images

HAT Antibody (Center) Blocking Peptide - Background

HAT is a trypsin-like serine protease released from the submucosal serous glands onto mucous membrane. It is a type II integral membrane protein and has 29-38% identity in the sequence of the catalytic region with human hepsin, enteropeptidase, acrosin, and mast cell tryptase. The noncatalytic region has little similarity to other known proteins. This protein may play some biological role in the host defense system on the mucous membrane independently of or in cooperation with other substances in airway mucous or bronchial secretions.

HAT Antibody (Center) Blocking Peptide - References

Bottcher, E., J. Virol. 80 (19), 9896-9898 (2006)