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STT3B Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP4883b

Specification

STT3B Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q8TCJ2

STT3B Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 201595

Other Names
Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit STT3B, Oligosaccharyl transferase subunit STT3B, STT3-B, Source of immunodominant MHC-associated peptides homolog, STT3B, SIMP

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.

STT3B Antibody (C-term) Blocking Peptide - Protein Information

Name STT3B (HGNC:30611)

Synonyms SIMP

Function
Catalytic subunit of the oligosaccharyl transferase (OST) complex that catalyzes the initial transfer of a defined glycan (Glc(3)Man(9)GlcNAc(2) in eukaryotes) from the lipid carrier dolichol-pyrophosphate to an asparagine residue within an Asn-X-Ser/Thr consensus motif in nascent polypeptide chains, the first step in protein N-glycosylation (PubMed:31831667). N-glycosylation occurs cotranslationally and the complex associates with the Sec61 complex at the channel-forming translocon complex that mediates protein translocation across the endoplasmic reticulum (ER). All subunits are required for a maximal enzyme activity. This subunit contains the active site and the acceptor peptide and donor lipid-linked oligosaccharide (LLO) binding pockets (By similarity). STT3B is present in a small subset of OST complexes and mediates both cotranslational and post-translational N-glycosylation of target proteins: STT3B- containing complexes are required for efficient post-translational glycosylation and while they are less competent than STT3A-containing complexes for cotranslational glycosylation, they have the ability to mediate glycosylation of some nascent sites that are not accessible for STT3A.

STT3B-containing complexes also act post-translationally and mediate modification of skipped glycosylation sites in unfolded proteins. Plays a role in ER-associated degradation (ERAD) pathway that mediates ubiquitin-dependent degradation of misfolded endoplasmic reticulum proteins by mediating N-glycosylation of unfolded proteins, which are then recognized by the ERAD pathway and targeted for degradation. Mediates glycosylation of the disease variant AMYL-TTR 'Asp-38' of TTR at 'Asn-118', leading to its degradation (PubMed:19167329, PubMed:22607976).

Cellular Location
Endoplasmic reticulum. Endoplasmic reticulum membrane; Multi- pass membrane protein {ECO:0000250|UniProtKB:P39007}

Tissue Location
Expressed in heart, brain, placenta, lung, liver, muscle, kidney and pancreas. Expressed in skin fibroblasts (at protein level).

STT3B Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

STT3B Antibody (C-term) Blocking Peptide - Images

STT3B Antibody (C-term) Blocking Peptide - Background

STT3B contains a highly immunogenic minor histocompatibility antigen epitope of 9 amino acids, B6(dom1). Like ITM1 (MIM 601134), SIMP is homologous to yeast STT3, an oligosaccharyltransferase essential for cell proliferation.

STT3B Antibody (C-term) Blocking Peptide - References

Ruiz-Canada, C., et al. Cell 136(2):272-283(2009)Olsen, J.V., et al. Cell 127(3):635-648(2006)Shibatani, T., et al. Biochemistry 44(16):5982-5992(2005)