

STT3A Polyclonal antibody

Catalog Number: 12034-1-AP

23 Publications

Basic Information

Catalog Number:

12034-1-AP

Concentration:

500 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG2698

GenBank Accession Number:

BC020965

GeneID (NCBI):

3703

UNIPROT ID:

P46977

Full Name:

STT3, subunit of the oligosaccharyltransferase complex, homolog A (*S. cerevisiae*)

Calculated MW:

705 aa, 81 kDa

Observed MW:

65-100 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human

Cited Species:

human, mouse, rat

Positive Controls:

WB : HepG2 cells, K-562 cells

IHC : human stomach tissue, human stomach cancer tissue

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

STT3A, also named as Dolichyl-diphosphooligosaccharide--protein glycosyltransferase subunit STT3A, is a 705 amino acid protein, which belongs to the STT3 family. STT3A is expressed at high levels in placenta, liver, muscle and pancreas, and at very low levels in brain, lung and kidney. STT3A is a catalytic subunit of the N-oligosaccharyl transferase (OST) complex which catalyzes the transfer of a high mannose oligosaccharide from a lipid-linked oligosaccharide donor to an asparagine residue within an Asn-X-Ser/Thr consensus motif in nascent polypeptide chains. 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). STT3A seems to be involved in complex substrate specificity. STT3A is present in the majority of OST complexes and mediates cotranslational N-glycosylation of most sites on target proteins, while STT3B-containing complexes are required for efficient post-translational glycosylation and mediate glycosylation of sites that have been skipped by STT3A.

Notable Publications

Author	Pubmed ID	Journal	Application
Xinxin Song	32938586	Cancer Discov	WB,IP,IF
Shih-Han Wang	36381324	Am J Cancer Res	
Cecilia Lopez-Sambrooks	27694802	Nat Chem Biol	WB

Storage

Storage:

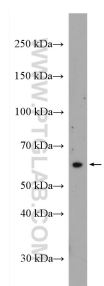
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

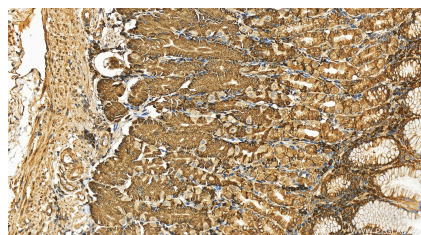
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

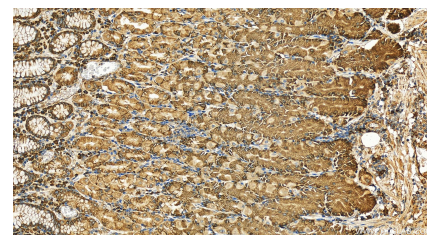
Selected Validation Data



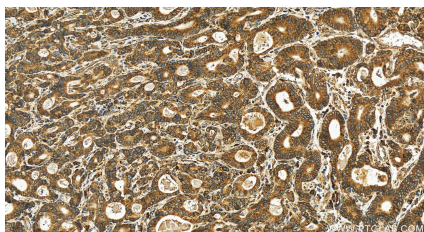
HepG2 cells were subjected to SDS PAGE followed by western blot with 12034-1-AP (STT3A antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 12034-1-AP (STT3A antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 12034-1-AP (STT3A antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 12034-1-AP (STT3A antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).