

ITM1 (H-79): sc-134685

BACKGROUND

ITM1 (integral membrane protein 1), also known as TMC (transmembrane protein TMC) or STT3A (STT3, subunit of the oligosaccharyltransferase complex, homolog A), is a member of the STT3 family of proteins. Predominantly expressed in liver, pancreas, muscle, placenta and skin fibroblasts, ITM1 is a multi-pass membrane protein that localizes to the membrane of the endoplasmic reticulum (ER). ITM1 is one of two multicellular eukaryotic homologs of the *S. cerevisiae* protein STT3, an essential component of the yeast OST (oligosaccharyltransferase) complex. Both homologs (ITM1 and SIMP) are glycosylated and function as the catalytic component of the mammalian OST complex which is responsible for catalyzing the transfer of a high mannose oligosaccharide to an asparagine residue in nascent proteins that enter the lumen of the ER. Using lipid-linked oligosaccharides as donors, the OST complex specifically transfers the oligosaccharide to the asparagine residue in an Asn-X-Ser/Thr consensus motif (X is any amino acid excluding proline). Compared with SIMP, ITM1 is less active but also more selective in terms of substrates.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: STT3A (human) mapping to 11q24.2; Stt3a (mouse) mapping to 9 A4.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

SOURCE

ITM1 (H-79) is a rabbit polyclonal antibody raised against amino acids 407-485 mapping within an internal region of ITM1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ITM1 (H-79) is recommended for detection of ITM1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

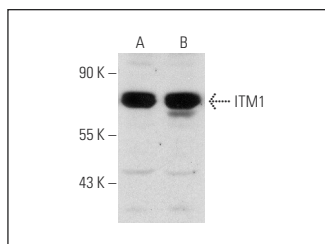
ITM1 (H-79) is also recommended for detection of ITM1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ITM1 siRNA (h): sc-97076, ITM1 siRNA (m): sc-146310, ITM1 shRNA Plasmid (h): sc-97076-SH, ITM1 shRNA Plasmid (m): sc-146310-SH, ITM1 shRNA (h) Lentiviral Particles: sc-97076-V and ITM1 shRNA (m) Lentiviral Particles: sc-146310-V.

Molecular Weight of glycosylated ITM1 diffuse: 60-70 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, K-562 whole cell lysate: sc-2203 or COLO 320DM cell lysate: sc-2226.

DATA



ITM1 (H-79): sc-134685. Western blot analysis of ITM1 expression in HEK293 (A) and K-562 (B) whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS
Satisfaction
Guaranteed

Try **ITM1 (A-2): sc-390227** or **ITM1 (JA-07): sc-100796**, our highly recommended monoclonal alternatives to ITM1 (H-79).