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SLC35D2 Antibody

Catalog # ASC11391

Product Information

Application	WB, ICC, E
Primary Accession	Q76EJ3
Other Accession	NP_008932, 223029426
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	36673
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SLC35D2 antibody can be used for detection of SLC35D2 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunocytochemistry starting at 5 g/mL.

Additional Information

Gene ID	11046
Other Names	UDP-N-acetylglucosamine/UDP-glucose/GDP-mannose transporter, Homolog of Fringe connection protein 1, HFRC1, SQV7-like protein, SQV7L, Solute carrier family 35 member D2, UDP-galactose transporter-related protein 8, UGTrel8, SLC35D2, HFRC, UGTREL8
Target/Specificity	SLC35D2; At least two isoforms of SLC35D2 are known to exist; this antibody will recognize both isoforms. SLC35D2 antibody is predicted to not cross-react with SLC35D1 or SLC35D3.
Reconstitution & Storage	SLC35D2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	SLC35D2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC35D2 (HGNC:20799)
Function	Nucleotide sugar antiporter transporting UDP-N- acetylglucosamine (UDP-GlcNAc) and UDP-glucose (UDP-Glc) from the cytosol into the lumen of the Golgi in exchange of UMP. By supplying UDP-N-acetylglucosamine, a donor substrate to heparan sulfate synthases, probably takes part in the synthesis of these glycoconjugates.

Cellular Location	Golgi apparatus membrane; Multi-pass membrane protein
Tissue Location	Highly expressed in heart, kidney, small intestine, placenta, lung and peripheral blood leukocyte. Weakly expressed in skeletal muscle and spleen. Not expressed in brain, colon and thymus

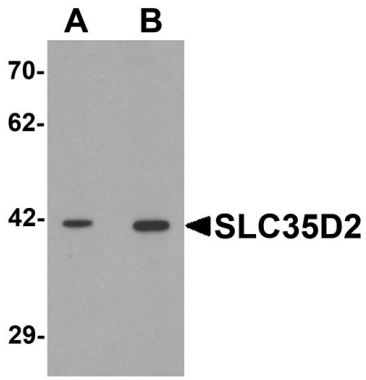
Background

SLC35D2 Antibody: The solute carrier family SLC35 consists of at least 17 proteins that act as nucleotide sugar transporters localized to the Golgi apparatus and endoplasmic reticulum. The role of the ER-resident SLC family member SLC35D2 is to transport both UDP-glucuronic acid and UDP-N-acetylgalactosamine. Its overexpression in transfected cells modulated cell surface heparin sulfate expression, suggesting that SLC35D2 is involved in heparin sulfate synthesis. SLC35D2-overexpressing cells also showed increased constitutive and hypotonic stress-stimulated release of UDP-GlcNAc, suggesting that SLC35D2 may be involved in UDP-sugar release and cell signaling.

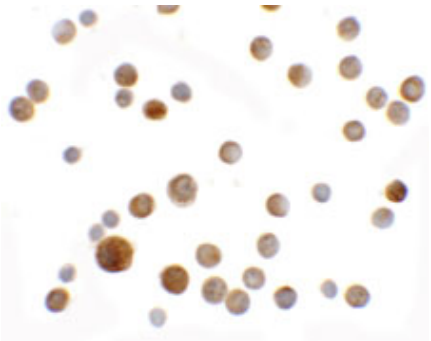
References

Ishida N and Kawakita M. Molecular physiology and pathology of the nucleotide sugar transporter family (SLC35). Pflugers Arch. 2004; 447:768-75.
Suda T, Kamiyama S, Suzuki M, et al. Molecular cloning and characterization of a human multisubstrate specific nucleotide-sugar transporter homologous to Drosophila fringe connection. J. Biol. Chem. 2004; 279:26469-74
Sesma JI, Esther Jr CR, Kreda SM, et al. Endoplasmic reticulum/Golgi nucleotide sugar transporters contribute to the cellular release of UDP-sugar signaling molecules. J. Biol. Chem. 2009; 284:12572-83.

Images



Western blot analysis of SLC35D2 in HeLa cell lysate with SLC35D2 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of SLC35D2 in HeLa cells with SLC35D2 antibody at 5 µg/mL.