

Slc35D1 (NT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat Slc35D1 (Solute carrier family 35 member D1)

Instruction Manual

Catalog Number	PK-AB718-4649
Synonyms	Slc35D1 Antibody: Solute carrier family 35 member D1, UDP-glucuronic acid, UDP-N-acetylgalactosamine transporter
Description	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 Slc35D1 is to transport both UDP-glucuronic acid and UDP-N-acetylgalactosamine. These molecules can serve as substrates for chondroitin sulfate biosynthesis and mice lacking the Slc35D1 gene developed a lethal form of skeletal dysplasia with severe shortening of limbs and facial structures. Examination of epiphyseal cartilage in these mice revealed a decreased proliferating zone with round chondrocytes, scarce matrices, and reduced proteoglycan aggregates. Loss of function mutations in human Slc35D1 cause Schneckenbecken dysplasia, a severe skeletal dysplasia. This antibody is predicted to not cross-react with the highly homologous Slc35D2.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Slc35D1 antibody was raised in rabbits against a 14 amino acid peptide near the amino terminus of the human Slc35D1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	This antibody is predicted to not cross-react with the highly homologous Slc35D2.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. Slc35D1 antibody can be used for detection of Slc35D1 by Western blot at 1 - 2 µg/mL.
Images	Available upon request.
References	Ishida N and Kawakita M. Molecular physiology and pathology of the nucleotide sugar transporter family (SLC35). Pflugers Arch. 2004; 447:768-75. Muraoka M, Kawakita M, and Ishita N. Molecular characterization of human UDP-glucuronic acid/UDP-N-acetylgalactosamine transporter, a novel nucleotide sugar transporter with dual substrate specificity. FEBS Lett. 2001; 495:87-93. Hiraoka S, Furuichi T, Nishimura G, et al. Nucleotide-sugar transporter Slc35D1 is critical to chondroitin sulfate synthesis in cartilage and skeletal development in mouse and human. Nat. Med. 2007; 13:1363-7.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4649P; Slc35D1 Peptide Cat. No. PK-AB718-1288; A20 Cell Lysate

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