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NDST2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5759b

Product Information

Application	WB, E
Primary Accession	P52849
Other Accession	NP_003626.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21472
Calculated MW	100875
Antigen Region	817-844

Additional Information

Gene ID	8509
Other Names	Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 2, Glucosaminyl N-deacetylase/N-sulfotransferase 2, NDST-2, N-heparan sulfate sulfotransferase 2, N-HSST 2, Heparan sulfate N-deacetylase 2, 3---, Heparan sulfate N-sulfotransferase 2, 282-, NDST2, HSST2
Target/Specificity	This NDST2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 817-844 amino acids of human NDST2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NDST2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NDST2
Synonyms	HSST2

Function	Essential bifunctional enzyme that catalyzes both the N- deacetylation and the N-sulfation of glucosamine (GlcNAc) of the glycosaminoglycan in heparan sulfate. Modifies the GlcNAc-GlcA disaccharide repeating sugar backbone to make N-sulfated heparosan, a prerequisite substrate for later modifications in heparin biosynthesis. Plays a role in determining the extent and pattern of sulfation of heparan sulfate. Required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:22660413).
Cellular Location	Golgi apparatus membrane; Single- pass type II membrane protein

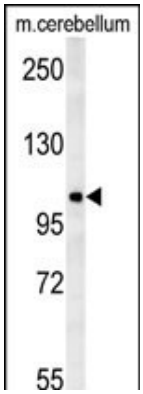
Background

NDST2 is a member of the N-deacetylase/N-sulfotransferase subfamily of the sulfotransferase 1 proteins. The encoded enzyme has dual functions in processing glucosamine and heparin polymers, including N-deacetylation and N-sulfation. The encoded protein may be localized to the Golgi.

References

Duncan, M.B., et al. Biochem. Biophys. Res. Commun. 339(4):1232-1237(2006)
Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)
Carter, N.M., et al. J. Cell. Sci. 116 (PT 17), 3591-3600 (2003)

Images



NDST2 Antibody (C-term) (Cat. #AP5759b) western blot analysis in mouse cerebellum tissue lysates (15ug/lane).This demonstrates the NDST2 antibody detected NDST2 protein (arrow).

Citations

- Bioengineering murine mastocytoma cells to produce anticoagulant heparin.
- Bioengineered Chinese hamster ovary cells with Golgi-targeted 3-O-sulfotransferase-1 biosynthesize heparan sulfate with an antithrombin-binding site.
- Modulation of heparan sulfate biosynthesis by sodium butyrate in recombinant CHO cells.