10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CHSY1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13586c

Product Information

Application	WB, FC, E
Primary Accession	Q86X52
Other Accession	NP_055733.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32819
Calculated MW	91784
Antigen Region	504-533

Additional Information

Gene ID	22856
Other Names	Chondroitin sulfate synthase 1, Chondroitin glucuronyltransferase 1, Chondroitin synthase 1, ChSy-1, Glucuronosyl-N-acetylgalactosaminyl-proteoglycan 4-beta-N-acetylgalactosaminyltransferase 1, N-acetylgalactosaminyl-proteoglycan 3-beta-glucuronosyltransferase 1, N-acetylgalactosaminyltransferase 1, CHSY1, CHSY, CSS1, KIAA0990
Target/Specificity	This CHSY1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 504-533 amino acids from the Central region of human CHSY1.
Dilution	WB~~1:1000 FC~~1:10~50 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	CHSY1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CHSY1 (HGNC:17198)
Synonyms	CHSY, CSS1, KIAA0990
Function	Catalytic component of CHSY1-CHPF2 and CHSY1-CHPF chondroitin sulfate synthase complexes (PubMed:41298522). Has both beta-1,3- glucuronic acid and beta-1,4-N-acetylgalactosamine transferase activity. Transfers glucuronic acid (GlcUA) from UDP-GlcUA and N- acetylgalactosamine (GalNAc) from UDP-GalNAc to the non-reducing end of the elongating chondroitin polymer (PubMed:11514575, PubMed:12716890). Involved in the negative control of osteogenesis likely through the modulation of NOTCH signaling.
Cellular Location	Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein. Secreted
Tissue Location	Ubiquitous, with the highest levels in placenta. Detected at low levels in brain, heart, skeletal muscle, colon, thymus, spleen, kidney, liver, adrenal gland, mammary gland, stomach, small intestine, lung and peripheral blood leukocytes

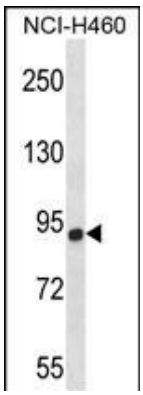
Background

CHSY1 synthesizes chondroitin sulfate, a glycosaminoglycan expressed on the surface of most cells and in extracellular matrices. Glycosaminoglycan chains are covalently linked to a wide range of core protein families and regulate many biologic processes, including cell proliferation and recognition, extracellular matrix deposition, and morphogenesis.[supplied by OMIM].

References

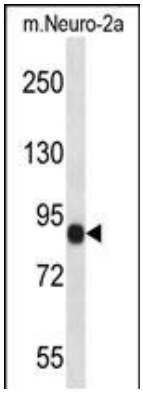
Yada, T., et al. J. Biol. Chem. 278(41):39711-39725(2003)
Clark, H.F., et al. Genome Res. 13(10):2265-2270(2003)
Kitagawa, H., et al. J. Biol. Chem. 278(26):23666-23671(2003)
Kitagawa, H., et al. J. Biol. Chem. 276(42):38721-38726(2001)

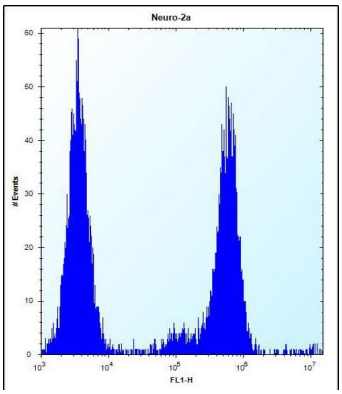
Images



CHSY1 Antibody (Center) (Cat. #AP13586c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the CHSY1 antibody detected the CHSY1 protein (arrow).

CHSY1 Antibody (Center) (Cat. #AP13586c) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane).This demonstrates the CHSY1 antibody detected the CHSY1 protein (arrow).





CHSY1 Antibody (Center) (Cat. #AP13586c) flow cytometric analysis of Neuro-2a cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.