

HAS2 Antibody (Center) Blocking peptide Synthetic peptide Catalog # BP5687c

Specification

HAS2 Antibody (Center) Blocking peptide - Product Information

Primary Accession Other Accession

<u>Q92819</u> <u>NP 005319.1</u>

HAS2 Antibody (Center) Blocking peptide - Additional Information

Gene ID 3037

Other Names Hyaluronan synthase 2, Hyaluronate synthase 2, Hyaluronic acid synthase 2, HA synthase 2, HAS2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HAS2 Antibody (Center) Blocking peptide - Protein Information

Name HAS2 (HGNC:4819)

Function

Catalyzes the addition of GlcNAc or GlcUA monosaccharides to the nascent hyaluronan polymer (PubMed:20507985, PubMed:32993960, PubMed:23303191, PubMed:21228273, PubMed:21228273, PubMed:21228273

href="http://www.uniprot.org/citations/8798477" target="_blank">8798477, PubMed:21228273, PubMed:20507985). This is one of three isoenzymes responsible for cellular hyaluronan synthesis and it is particularly responsible for the synthesis of high molecular mass hyaluronan (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein Endoplasmic reticulum membrane; Multi- pass membrane protein. Vesicle. Golgi apparatus membrane; Multi-pass membrane protein. Lysosome



Note=Travels from endoplasmic reticulum (ER), Golgi to plasma membrane and either back to endosomes and lysosomes, or out into extracellular vesicles (PubMed:30394292). Post-translational modifications control HAS2 trafficking (PubMed:30394292).

Tissue Location Expressed in fibroblasts.

HAS2 Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

HAS2 Antibody (Center) Blocking peptide - Images

HAS2 Antibody (Center) Blocking peptide - Background

Hyaluronan or hyaluronic acid (HA) is a high molecularweight unbranched polysaccharide synthesized by a wide variety oforganisms from bacteria to mammals, and is a constituent of theextracellular matrix. It consists of alternating glucuronic acidand N-acetylglucosamine residues that are linked by beta-1-3 andbeta-1-4 glycosidic bonds. HA is synthesized by membrane-boundsynthase at the inner surface of the plasma membrane, and thechains are extruded through pore-like structures into theextracellular space. It serves a variety of functions, includingspace filling, lubrication of joints, and provision of a matrixthrough which cells can migrate. HA is actively produced duringwound healing and tissue repair to provide a framework for ingrowthof blood vessels and fibroblasts. Changes in the serumconcentration of HA are associated with inflammatory anddegenerative arthropathies such as rheumatoid arthritis. Inaddition, the interaction of HA with the leukocyte receptor CD44 isimportant in tissue-specific homing by leukocytes, andoverexpression of HA receptors has been correlated with tumormetastasis. HAS2 is a member of the newly identified vertebrategene family encoding putative hyaluronan synthases, and its aminoacid sequence shows significant homology to glycosaminoglycansynthetase (DG42) from Xenopus laevis, and human and murinehyaluronan synthase 1.

HAS2 Antibody (Center) Blocking peptide - References

Simpson, M.A., et al. J. Biol. Chem. 277(12):10050-10057(2002)Spicer, A.P., et al. Biochem. Soc. Trans. 27(2):109-115(1999)Spicer, A.P., et al. Genomics 41(3):493-497(1997)Watanabe, K., et al. J. Biol. Chem. 271(38):22945-22948(1996)