

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

HAS2 Antibody (Center) Blocking peptide - Product Information

Primary Accession [O92819](#)
Other Accession [NP_005319.1](#)

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) (Probable). Therefore, it is essential to hyaluronan synthesis a major component of most extracellular matrices that has a structural role in tissues architectures and regulates cell adhesion, migration and differentiation (PubMed: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.

- [Blocking Peptides](#)

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 of organisms from bacteria to mammals, and is a constituent of the extracellular matrix. It consists of alternating glucuronic acid and N-acetylglucosamine residues that are linked by beta-1-3 and beta-1-4 glycosidic bonds. HA is synthesized by membrane-bound synthase at the inner surface of the plasma membrane, and the chains are extruded through pore-like structures into the extracellular space. It serves a variety of functions, including space filling, lubrication of joints, and provision of a matrix through which cells can migrate. HA is actively produced during wound healing and tissue repair to provide a framework for ingrowth of blood vessels and fibroblasts. Changes in the serum concentration of HA are associated with inflammatory and degenerative arthropathies such as rheumatoid arthritis. In addition, the interaction of HA with the leukocyte receptor CD44 is important in tissue-specific homing by leukocytes, and overexpression of HA receptors has been correlated with tumor metastasis. HAS2 is a member of the newly identified vertebrate gene family encoding putative hyaluronan synthases, and its amino acid sequence shows significant homology to glycosaminoglycan synthetase (DG42) from *Xenopus laevis*, and human and murine hyaluronan 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)