

### HAS1 Antibody (Center) Blocking Peptide Synthetic peptide

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Catalog # BP4928c

## Specification

# HAS1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

### <u>Q92839</u>

# HAS1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 3036

**Other Names** Hyaluronan synthase 1, Hyaluronate synthase 1, Hyaluronic acid synthase 1, HA synthase 1, HuHAS1, HAS1, HAS

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.

## HAS1 Antibody (Center) Blocking Peptide - Protein Information

Name HAS1

Synonyms HAS

### Function

Catalyzes the addition of GlcNAc or GlcUA monosaccharides to the nascent hyaluronan polymer. 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. This is one of the isozymes catalyzing that reaction. Also able to catalyze the synthesis of chito- oligosaccharide depending on the substrate (By similarity).

Cellular Location Membrane; Multi-pass membrane protein

#### **Tissue Location**

Widely expressed. Highly expressed in ovary followed by spleen, thymus, prostate, testes and large intestine Weakly expressed in small intestine.



# HAS1 Antibody (Center) Blocking Peptide - Protocols

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

### • **Blocking Peptides**

# HAS1 Antibody (Center) Blocking Peptide - Images

### HAS1 Antibody (Center) Blocking Peptide - Background

Hyaluronan or hyaluronic acid (HA) is a high molecular weight 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. HAS1 is a member of the newly identified vertebrate gene family encoding putative hyaluronan synthases, and its amino acid sequence shows significant homology to the hasA gene product of Streptococcus pyogenes, a glycosaminoglycan synthetase (DG42) from Xenopus laevis, and a recently described murine hyaluronan synthase.

### HAS1 Antibody (Center) Blocking Peptide - References

Vigetti, D., et al. J. Biol. Chem. 284(44):30684-30694(2009)Berdiaki, A., et al. Biochim. Biophys. Acta 1790(10):1258-1265(2009)Ghosh, A., et al. J. Biol. Chem. 284(28):18840-18850(2009)