

#### HAS1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4928c

#### Specification

# HAS1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>Q92839</u>
Other Accession	<u>Q61647</u>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	166-193

# HAS1 Antibody (Center) - Additional Information

#### Gene ID 3036

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

#### Target/Specificity

This HAS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 166-193 amino acids from the Central region of human HAS1.

**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

HAS1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# HAS1 Antibody (Center) - 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) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HAS1 Antibody (Center) - Images



Western blot analysis of HAS1 Antibody (Center) (Cat. #AP4928c) in ZR-75-1 cell line lysates (35ug/lane). HAS1 (arrow) was detected using the purified Pab.

# HAS1 Antibody (Center) - 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) - 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) HAS1 Antibody (Center) - Citations • Regulation of the hyaluronan system in ovine endometrium by ovarian steroids.