HAS2 Antibody (Center)
Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5687c

Specification

HAS2 Antibody (Center) - Product Information

- **Application**: FC, IHC-P, WB, E
- **Primary Accession**: Q92819
- **Other Accession**: NP_005319.1
- **Reactivity**: Human, Mouse
- **Host**: Rabbit
- **Clonality**: Polyclonal
- **Isotype**: Rabbit IgG
- **Antigen Region**: 138-166

HAS2 Antibody (Center) - Additional Information

- **Gene ID**: 3037
- **Other Names**: Hyaluronan synthase 2, Hyaluronate synthase 2, Hyaluronic acid synthase 2, HA synthase 2, HAS2

**Target/Specificity**
This HAS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 138-166 amino acids of human HAS2.

**Dilution**
- FC—1:10–50
- IHC-P—1:50–100
- WB—1:1000

**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**
HAS2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HAS2 Antibody (Center) - Protein Information

- **Name**: HAS2

Immunohistochemical analysis of paraffin-embedded H. kidney section using HAS2 Antibody (Center)(Cat#AP5687C). AP5687C was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.
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 isoforms catalyzing that reaction and it is particularly responsible for the synthesis of high molecular mass hyaluronan. Required for the transition of endocardial cushion cells into mesenchymal cells, a process crucial for heart development. May also play a role in vasculogenesis. High molecular mass hyaluronan also play a role in early contact inhibition a process which stops cell growth when cells come into contact with each other or the extracellular matrix (By similarity).

Cellular Location
Membrane; Multi-pass membrane protein

Tissue Location
Expressed in fibroblasts.

HAS2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytometry
- Cell Culture

Western blot analysis of lysate from mouse heart tissue lysate, using HAS2 Antibody (Center)(Cat. #AP5687c). AP5687c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

Western blot analysis of lysates from SW620 cell line, human heart, mouse heart tissue(from left to right), using HAS2 Antibody (Center)(Cat. #AP5687c). AP5687c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

HAS2 Antibody (Center) (Cat. #AP5687c) immunohistochemistry analysis in formalin
fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the HAS2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

HAS2 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. 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) - References


HAS2 Antibody (Center) - Citations

- **Differential expression of hyaluronan synthase 2 in breast carcinoma and its biological significance.**
- **Gene expression profile of a newly established choriocarcinoma cell line, iC3-1, compared to existing choriocarcinoma cell lines and normal placenta.**