

## ARG40286 anti-HAS1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes HAS1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HAS1
Species	Human
Immunogen	Synthetic peptide corresponding to a sequence of Human HAS1. (NRAEDLYMVD MFREVF ADEDPATYVWDGNYHQPEPA)
Conjugation	Un-conjugated
Alternate Names	EC 2.4.1.212; Hyaluronate synthase 1; HA synthase 1; Hyaluronic acid synthase 1; HuHAS1; HAS; Hyaluronan synthase 1

### Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 65 kDa	

### Properties

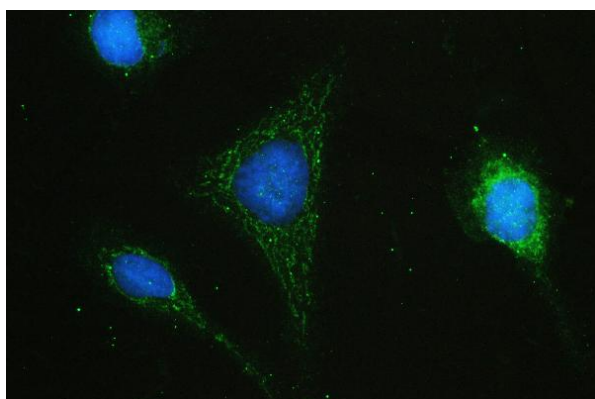
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

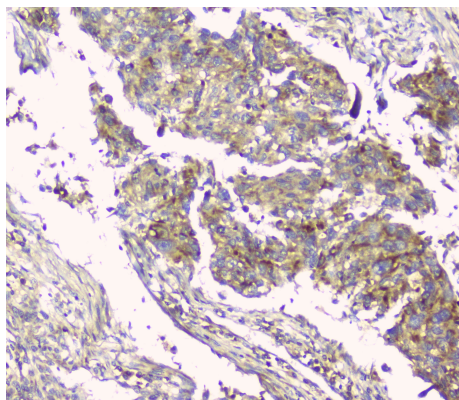
Gene Symbol	HAS1
Gene Full Name	hyaluronan synthase 1
Background	<p>Hyaluronan or hyaluronic acid (HA) is a high molecular weight unbranched polysaccharide synthesized by a wide variety of organisms from bacteria to mammals, and is a constituent of the extracellular matrix. It consists of alternating 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 <i>Streptococcus pyogenes</i>, a glycosaminoglycan synthetase (DG42) from <i>Xenopus laevis</i>, and a recently described murine hyaluronan synthase. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]</p>
Function	<p>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). [UniProt]</p>
Calculated Mw	65 kDa
Cellular Localization	Membrane; Multi-pass membrane protein. [UniProt]

## Images



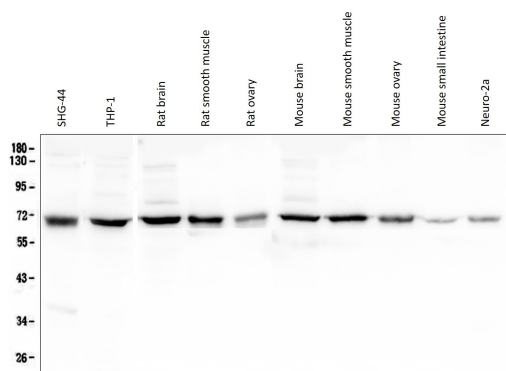
ARG40286 anti-HAS1 antibody ICC/IF image

Immunofluorescence: U2OS cells were blocked with 10% goat serum and then stained with ARG40286 anti-HAS1 antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



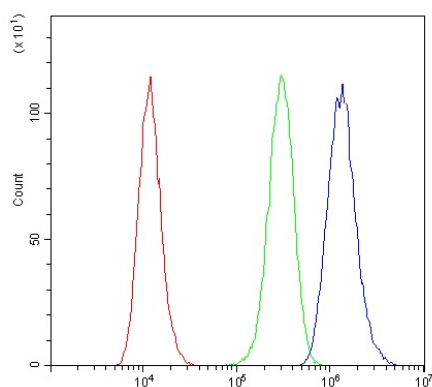
ARG40286 anti-HAS1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40286 anti-HAS1 antibody at 1 µg/ml, overnight at 4°C.



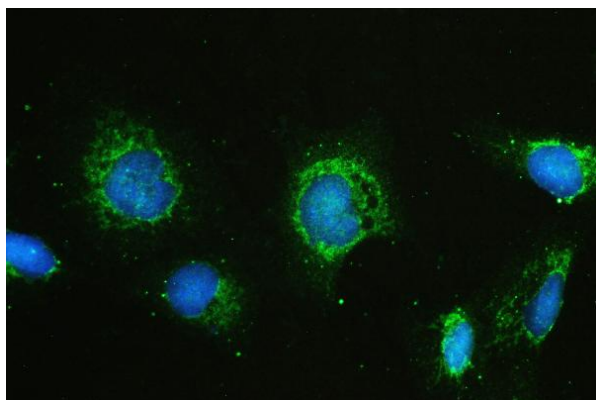
ARG40286 anti-HAS1 antibody WB image

Western blot: 50 µg of samples under reducing conditions. SHG-44, THP-1, Rat brain, Rat smooth muscle, Rat ovary, Mouse brain, Mouse smooth muscle, Mouse ovary, Mouse small intestine and Mouse Neuro-2a whole cell lysates stained with ARG40286 anti-HAS1 antibody at 0.5 µg/ml, overnight at 4°C.



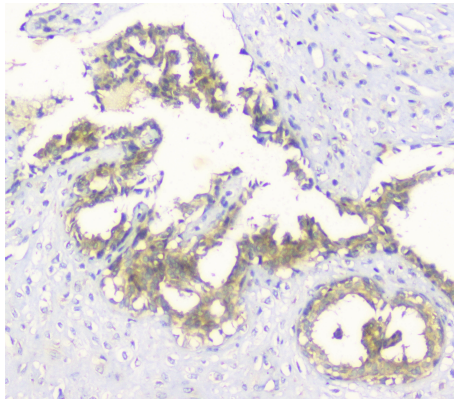
ARG40286 anti-HAS1 antibody FACS image

Flow Cytometry: U-87MG cells were blocked with 10% normal goat serum and then stained with ARG40286 anti-HAS1 antibody (blue) at 1 µg/10<sup>6</sup> cells for 30 min at 20°C, followed by incubation with DyLight<sup>®</sup>488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 µg/10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



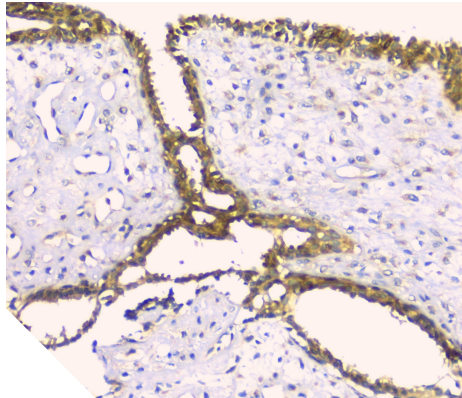
ARG40286 anti-HAS1 antibody ICC/IF image

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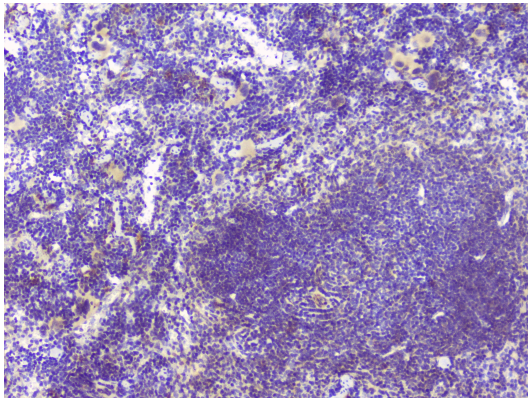
ARG40286 anti-HAS1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40286 anti-HAS1 antibody at 1 µg/ml, overnight at 4°C.



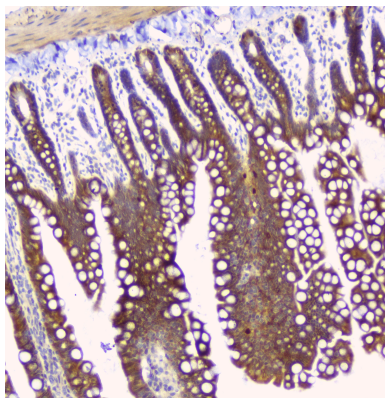
ARG40286 anti-HAS1 antibody IHC-P image

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ARG40286 anti-HAS1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse spleen tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40286 anti-HAS1 antibody at 1 µg/ml, overnight at 4°C.



ARG40286 anti-HAS1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat small intestine tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40286 anti-HAS1 antibody at 1 µg/ml, overnight at 4°C.