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HAS3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18700c

Product Information

Application	WB, E
Primary Accession	O00219
Other Accession	O08650, NP_005320.2
Reactivity	Human, Mouse
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39535
Calculated MW	62998
Antigen Region	137-164

Additional Information

Gene ID	3038
Other Names	Hyaluronan synthase 3, Hyaluronate synthase 3, Hyaluronic acid synthase 3, HA synthase 3, HAS3
Target/Specificity	This HAS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 137-164 amino acids from the Central region of human HAS3.
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	HAS3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HAS3 (HGNC:4820)
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 three isoenzymes responsible for cellular hyaluronan synthesis.

Cellular Location

Cell membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Golgi apparatus, trans-Golgi network membrane {ECO:0000250|UniProtKB:O08650}; Multi-pass membrane protein. Early endosome. Note=Travels from endoplasmic reticulum (ER), Golgi to plasma membrane (PubMed:26883802). Actives only when present in plasma membrane (By similarity). O-GlcNAcylation controls its membrane localization (PubMed:26883802). A rapid recycling of HAS3 between plasma membrane and endosomes is controlled by the cytosolic levels of UDP-GlcUA and UDP-GlcNAc (PubMed:26883802) {ECO:0000250|UniProtKB:O08650, ECO:0000269|PubMed:26883802}

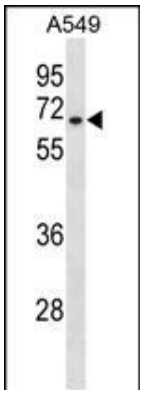
Background

The protein encoded by this gene is involved in the synthesis of the unbranched glycosaminoglycan hyaluronan, or hyaluronic acid, which is a major constituent of the extracellular matrix. This gene is a member of the NODC/HAS gene family. Compared to the proteins encoded by other members of this gene family, this protein appears to be more of a regulator of hyaluronan synthesis. Alternative splicing results in multiple transcript variants.

References

Dunn, K.M., et al. Surgery 145(3):322-329(2009)
Nykopp, T.K., et al. BMC Cancer 9, 143 (2009) :
Nair, S., et al. J. Nephrol. 21(3):400-405(2008)
Campo, G.M., et al. Mol. Cell. Biochem. 292 (1-2), 169-178 (2006) :
Grskovic, B., et al. Biochim. Biophys. Acta 1760(6):890-895(2006)

Images



HAS3 Antibody (Center) (Cat. #AP18700c) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the HAS3 antibody detected the HAS3 protein (arrow).