

## Full-Length

# HAS1 (Human) Recombinant Protein (P01)

Catalog # H00003036-P01

Size 50 ug

## Specification

Product Description	Human HAS1 full-length ORF (AAH35837.1, 1 a.a. - 577 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MRQDAPKPTPAARRCSGLARRVLTIAFALLILGLMTWAYAAGVPLASDRYGLLAFLGLYGAFLSAHL VAQSLFAYLEHRRVAAAARGPLDAATARSVALTISAYQEDPAYLRQCLASARALLYPRARLRVLM VVDGNRAEDLYMVDMFREVFADDPATYVWDGNYHQPWEPAAGAVGAGAYREVEAEDPGRL AVEALVRTRRCVCVAQRWGGKREVMYAFKALGDSMDYVQVCDSDTRLDPALLELVRLDE DPRVGAVGGDVRLNPLDSWVSFLSSRLYWVAFNVERACQSYFHCVSCISGPLGLYRNNLLQQF LEAWYNQKFLGTHCTFGDDRHLNRMLSMGYATKYTSRRCYSETPSSFLRWLSQQTRWSKSYF REWLYNALWWHRHHAWMTYEAVVSGLFPFFVAATVLRFLYAGRPWALLWVLLCVQGVAKAA FAAWLRGCLRMVLLSLYAPLYMCGLLPAKFLALVTMNQSGWGTSGRRKLAANYVPLLPLALWAL LLLGGLVRSVAHEARADWSGPSRAAEAYHLAAGAGAYVGYWVAMLTYWVGVRRLCRRRTGGY RVQV
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	89.87
Interspecies Antigen Sequence	Mouse (95); Rat (95)
Preparation Method	<a href="#">in vitro wheat germ expression system</a>
Purification	Glutathione Sepharose 4 Fast Flow
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

## Applications

- Enzyme-linked Immunoabsorbent Assay

- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — HAS1

Entrez GeneID [3036](#)

GeneBank Accession# [BC035837.1](#)

Protein Accession# [AAH35837.1](#)

Gene Name HAS1

Gene Alias HAS

Gene Description hyaluronan synthase 1

Omim ID [601463](#)

Gene Ontology [Hyperlink](#)

### Gene Summary

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. [provided by RefSeq]

Other Designations -

## Disease

- [Genetic Predisposition to Disease](#)

- [Waldenstrom Macroglobulinemia](#)