

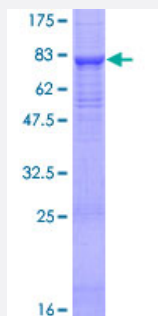
Full-Length

SPAM1 (Human) Recombinant Protein (P01)

Catalog # H00006677-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human SPAM1 full-length ORF (NP_694859.1, 1 a.a. - 509 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MGVLKFKHIFRSFVKSSGVSQVFTLLIPCCCLTNFRAPPVIPNPFLWAWNAPSEFCLGKFDE
PLDMSLFSGIFSPRINATGQGVTFYVDRLGYYPYDSITGVTVNGGIPQKISLQDHLKAKKDITFYMP
VDNLGMAVIDWEEWRPTWARNWKPKDVYKNRSIELVQQQNVQLSLTEATEKAKQEFKAGKDF
LVETIKLGKLLRPNHLWGYYLFPDCYNHHYKKPGYNGSCFNVEIKRNDLSWLWNESTALYPSYL
NTQQSPVAATLYVRNRVREAIRVSKIPDAKSPLPVFAYTRIVFTDQVLKFLSQDELVYTFGETVALG
ASGIVWGTLSIMRSMKSCLLDNYMETILNPYIINVTLAAKMCSQVLCQEQGVCIRKNWNSSDYHL
NPDNFAIQLEKGGKFTVRGKPTLEDLEQFSEKFCSCYSTLSCKEKADVKTDAVDVCIADGVCI
DAFLKPPMETEEPQIFYNASPSTLSATMFVSILFLISSVASL

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

84.2

Interspecies Antigen Sequence

Mouse (63); Rat (62)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

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 — SPAM1

Entrez GeneID	6677
GeneBank Accession#	NM_153189.1
Protein Accession#	NP_694859.1
Gene Name	SPAM1
Gene Alias	HYA1, HYAL1, HYAL3, HYAL5, MGC26532, PH-20, PH20, SPAG15
Gene Description	sperm adhesion molecule 1 (PH-20 hyaluronidase, zona pellucida binding)
Omim ID	600930
Gene Ontology	Hyperlink

Gene Summary

Hyaluronidase degrades hyaluronic acid, a major structural proteoglycan found in extracellular matrices and basement membranes. Six members of the hyaluronidase family are clustered into two tightly linked groups on chromosome 3p21.3 and 7q31.3. This gene was previously referred to as HYAL1 and HYA1 and has since been assigned the official symbol SPAM1; another family member on chromosome 3p21.3 has been assigned HYAL1. This gene encodes a GPI-anchored enzyme located on the human sperm surface and inner acrosomal membrane. This multifunctional protein is a hyaluronidase that enables sperm to penetrate through the hyaluronic acid-rich cumulus cell layer surrounding the oocyte, a receptor that plays a role in hyaluronic acid induced cell signaling, and a receptor that is involved in sperm-zona pellucida adhesion. Abnormal expression of this gene in tumors has implicated this protein in degradation of basement membranes leading to tumor invasion and metastasis. Multiple protein isoforms are encoded by transcript variants of this gene. [provided by RefSeq]

Other Designations

hyaluronoglucosaminidase|sperm adhesion molecule 1|sperm surface protein PH-20

Pathway

- [Glycosaminoglycan degradation](#)
- [Metabolic pathways](#)

Disease

- [Cleft Lip](#)
- [Cleft Palate](#)