Recombinant Human SPAM1, His-Fc-tagged

Cat. No. SPAM1-1532H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PH20 is produced in CHO cells. By combining the sequence of PH20 with the Fc fragment of hunman IgG or 6His
Species	Human
Source	Human
Description	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 transcript variants encoding different isoforms have been found for this gene.
Purity	>90%

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Predicted N terminal	LNFRAPPVIP
Molecular Mass	Containing 6-His tag, length 488aa, weigth 62kDa; PH20 contains 482 amino acid residues, and 670aa after combining with the Fc fragment of IgGII, the MW of monomer and dimer is about 91 kDa and 182 kDa, respectively.
Storage	4μ for 6 months; -20μ for 1 year. Avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	SPAM1 sperm adhesion molecule 1 (PH-20 hyaluronidase, zona pellucida binding) [Homo sapiens]
Official Symbol	SPAM1
Synonyms	SPAM1; HYA1; PH20; HYAL1; HYAL3; HYAL5; PH-20; SPAG15; MGC26532; hyaluronidase PH-20; hyal-PH20; OTTHUMP00000211901; OTTHUMP00000211902; OTTHUMP00000211952; sperm surface protein PH-20; hyaluronoglucosaminidase PH-20
Gene ID	6677
mRNA Refseq	NM_001174044
Protein Refseq	NP_001167515
MIM	600930
UniProt ID	P38567
Chromosome	7q31.3

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Location	
Pathway	Glycosaminoglycan degradation; Metabolic pathways
Function	catalytic activity; hyaluronon glucosaminidase activity; hydrolase activity, acting on glycosyl bonds

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