

## Product datasheet for PH305378

### Hyaluronidase PH20 (SPAM1) (NM\_003117) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	SPAM1 MS Standard C13 and N15-labeled recombinant protein (NP_003108)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC205378
Predicted MW:	58.2 kDa
Protein Sequence:	>RC205378 representing NM_003117 Red=Cloning site Green=Tags(s)

MGVLKFKHIFFRSFKSSGVSQIVFTFLLIPCCCLTLNFRAPPVIPNVPFLWAWNAPSEFCLGKFDEPLDM  
SLFSFIGSPRINATGQGVTFIFYVDRLGYYPYIDSITGVTVNGGIPQKISLQDHLKAKKDITFYMPVDNL  
GMAVIDWEEWRPTWARNWPKDVKYKNSIELVQQNVQLSLTEATEKAKQEFKAGKDFLVETIKLGLLL  
RPNHLWGYYLFPDCYNHYYKPGYNGSCFNVEIKRNDLWLNWNESTALYPSIYLNTQQSPVAATLYVRN  
RVREAIRVSKIPDAKSPLPVFAYTRIVFTDQVLKFLSQDELVYTFGETVALGASGIVIWGTLSIMRSMKS  
CLLLDNMYMETILNPYIINVTLAAKMCSQVLCQEQGVCIKRNWNSDYHLNPDNFAIQLEKGGKFTVRGK  
PTLEDLEQFSEKFCSCYSTLSCKEKADVKDTDAVDVCIADGVCIDAFLKPPMETEEPQIFYNASPTLS  
ATMFIWRLEVWDQGISRIGFF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u><a href="#">NP_003108</a></u>
RefSeq Size:	2395
RefSeq ORF:	1533



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**Synonyms:** HEL-S-96n; HYA1; HYAL1; HYAL3; HYAL5; PH-20; PH20; SPAG15

**Locus ID:** 6677

**UniProt ID:** [P38567](#), [Q5D1J4](#)

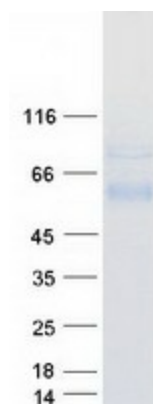
**Cytogenetics:** 7q31.32

**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 transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010]

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Glycosaminoglycan degradation, Metabolic pathways

### Product images:



Coomassie blue staining of purified SPAM1 protein (Cat# [TP305378]). The protein was produced from HEK293T cells transfected with SPAM1 cDNA clone (Cat# [RC205378]) using MegaTran 2.0 (Cat# [TT210002]).