



# Anti-SPAM1 (aa 346-445) polyclonal antibody (DPAB-DC2948)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                            |  |
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| <b>Antigen Description</b> | 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. |
| <b>Immunogen</b>           | SPAM1 (NP_003108, 346 a.a. ~ 445 a.a) partial recombinant protein with GST tag. The sequence is<br>RSMKSCLLLDNYMETILNPYIINVTLAAKMCSQVLCQEQQVCIRKNWNSSDYHLNPDNF<br>AIQLEKGGKFTVRGKPTLEDLEQFSEKFCSCYSTLSCKE  |
| <b>Source/Host</b>         | Mouse  |
| <b>Species Reactivity</b>  | Human  |
| <b>Conjugate</b>           | Unconjugated   |
| <b>Applications</b>        | WB (Recombinant protein), ELISA,   |
| <b>Size</b>                | 50 µl  |
| <b>Buffer</b>              | 50 % glycerol  |

|                     |  |
|---------------------|--|
| <b>Preservative</b> | None   |
| <b>Storage</b>      | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |

## GENE INFORMATION

|                            |  |
|----------------------------|--|
| <b>Gene Name</b>           | <a href="#">SPAM1 sperm adhesion molecule 1 (PH-20 hyaluronidase, zona pellucida binding) [ Homo sapiens (human) ]</a>   |
| <b>Official Symbol</b>     | SPAM1  |
| <b>Synonyms</b>            | SPAM1; sperm adhesion molecule 1 (PH-20 hyaluronidase, zona pellucida binding); HYA1; PH20; HYAL1; HYAL3; HYAL5; PH-20; SPAG15; HEL-S-96n; hyaluronidase PH-20; hyal-PH20; sperm surface protein PH-20; hyaluronoglucosaminidase PH-20; epididymis secretory sperm binding protein Li 96n; |
| <b>Entrez Gene ID</b>      | <a href="#">6677</a>   |
| <b>Protein Refseq</b>      | <a href="#">NP_001167515</a>   |
| <b>UniProt ID</b>          | <a href="#">P38567</a>   |
| <b>Chromosome Location</b> | 7q31.3   |
| <b>Pathway</b>             | Chondroitin sulfate degradation; Dermatan sulfate degradation; Fertilization; Glycosaminoglycan degradation  |
| <b>Function</b>            | hyaluronoglucosaminidase activity;   |