

Human CellExp SPAM1, human recombinant protein SPAM1, PH-20, HYAL3, HYA1, HYAL1, HYAL5, SPAG15 Catalog # PBV10877r

### Specification

## Human CellExp SPAM1, human recombinant protein - Product info

Primary Accession Calculated MW

#### <u>P38567</u>

This protein is fused with 6×His tag at the C-terminus, has a calculated MW of 52.1 kDa. The predicted N-terminus is Leu 36. DTT-reduced Protein migrates as 64-66 kDa due to glycosylation. KDa

## Human CellExp SPAM1, human recombinant protein - Additional Info

Gene ID 6677 Gene Symbol SPAM1 Other Names SPAM1, PH-20, HYAL3, HYA1, HYAL1, HYAL5, SPAG15

Gene Source Source Assay&Purity Assay2&Purity2 Recombinant Target/Specificity SPAM1 Human HEK 293 cells SDS-PAGE; ≥92% HPLC; Yes

#### **Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format Lyophilized powder

**Storage** -20°C; Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM NaCl, pH 7.0-7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

## Human CellExp SPAM1, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Human CellExp SPAM1, human recombinant protein - Images

# Human CellExp SPAM1, human recombinant protein - Background

Hyaluronidase PH-20 also known as Sperm adhesion molecule 1 (SPAM1) and Sperm surface protein PH-20, which belongs to the glycosyl hydrolase 56 family, SPAM1 / PH-20 is expressed in testis. SPAM-1 / PH20 random hydrolysis of (1->4)-linkages between N – acetyl – beta – D – glucosamine and D-glucuronate residues in hyaluronate. SPAM-1 / PH20 involved in sperm-egg adhesion. Upon fertilization sperm must first penetrate a layer of cumulus cells that surrounds the egg before reaching the zona pellucida. The cumulus cells are embedded in a matrix containing hyaluronic acid which is formed prior to ovulation. SPAM1 aids in penetrating the layer of cumulus cells by digesting hyaluronic acid.

## Human CellExp SPAM1, human recombinant protein - References

Lin Y., et al. Proc. Natl. Acad. Sci. U.S.A. 90:10071-10075(1993). Gmachl M., et al. FEBS Lett. 336:545-548(1993). Jones M.H., et al. Genomics 29:796-800(1995). Hillier L.W., et al. Nature 424:157-164(2003). Scherer S.W., et al. Science 300:767-772(2003).