

# SPAM1/PH20, Human CellExp™, human recombinant

<b>CATALOG #:</b>	7247-10	10 µg
	7247-50	50 µg
<b>ALTERNATE NAMES:</b>	SPAM1, PH-20, HYAL3, HYA1, HYAL1, HYAL5, SPAG15	
<b>SOURCE:</b>	HEK 293 cells (Leu 36 - Tyr 482)	
<b>PURITY:</b>	≥ 92% by SDS-PAGE gel	
<b>ENDOTOXIN LEVEL:</b>	<1 EU/µg by LAL method	
<b>FORM:</b>	Lyophilized	

**FORMULATION:** 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.

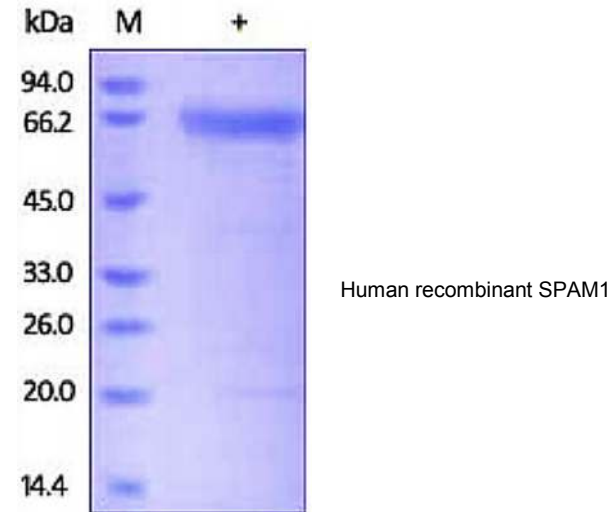
**MOL. WEIGHT:** This protein is fused with 6×His tag at the C-terminus, has a calculated MW of 52.1 kDa. The predicted N-terminus is Leu 36. DTT-reduced Protein migrates as 64-66 kDa due to glycosylation.

**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/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.

**DESCRIPTION:** 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.

**RELATED PRODUCTS:**

- Castanospermine (Cat. No. 2293-10, -50)
- JLP Antibody (Cat. No. 3736-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**