

Human SPP1/OPN Protein

Cat. No. SPP-HM101

Description

Source	Recombinant Human SPP1/OPN Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ile17-Asn300.
Accession	NP_000573.1
Molecular Weight	The protein has a predicted MW of 34.8 kDa. Due to glycosylation, the protein migrates to 50-60 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Ovarian cancer is one of the most lethal malignant tumors in women. Secreted phosphoprotein 1 (SPP1) plays an important role in some cancer types. The expression of SPP1 was higher in epithelial ovarian cancer tissues than in normal ovarian tissues. Silencing SPP1 decreased the cell proliferation, migration, and invasion. Ectopic expression of SPP1 increased the cell proliferation, migration, and invasion. Silencing SPP1 prevented ovarian cancer growth in mice. Silencing SPP1 inhibited Integrin β 1/FAK/AKT pathway.

Assay Data

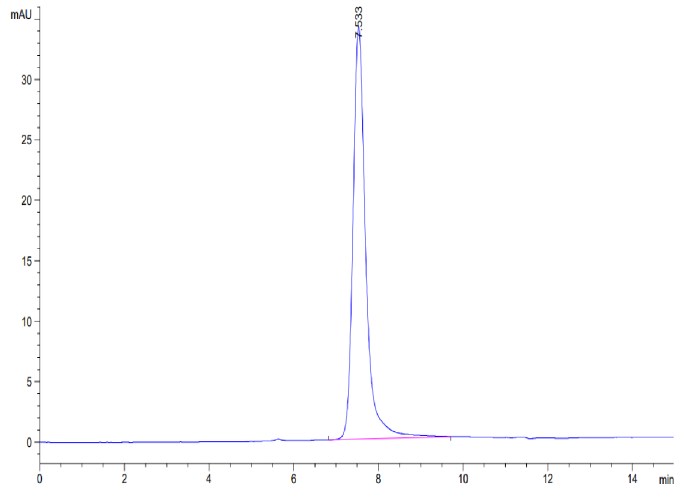
Bis-Tris PAGE



Human SPP1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



The purity of Human SPP1 is greater than 95% as determined by SEC-HPLC.