

Osteopontin Protein, Mouse, Recombinant (His)

General Information

Synonyms:	ETA-1;SPP1;OPN;Bone sialoprotein 1;BNSP;SPP-1;Osteopontin;Nephropontin;Uropontin;BSPI;BSP-1
Protein Construction:	Leu17-Asn294
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	P10923
Molecular Weight:	31.8 kDa (predicted). Due to glycosylation, the protein migrates to 50-60 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Secreted phosphoprotein 1 (SPP1) expression in TAMs isolated from lung adenocarcinoma tissues and PMA-treated THP-1 cells were measured. Macrophage polarization was identified by flow cytometric analysis. Cell migration and apoptosis were assessed by Transwell migration assays and flow cytometric analysis, respectively. SPP1 is highly expressed in tumor tissues and TAMs isolated from patients with an advanced TNM stage, and also

in PMA-treated THP-1 cells.

Reference

Zhang Y, et al. Upregulation of PD-L1 by SPP1 mediates macrophage polarization and facilitates immune escape in lung adenocarcinoma. Exp Cell Res. 2017 Oct 15;359(2):449-457. doi: 10.1016/j.yexcr.2017.08.028. Epub 2017 Aug 19. PMID: 28830685.

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