

Osteopontin/OPN Active Protein | OPN active protein

Recombinant mouse Osteopontin/OPN protein

CATALOG # AAA48410	HOST HEK293	APPLICATIONS SDS-Page
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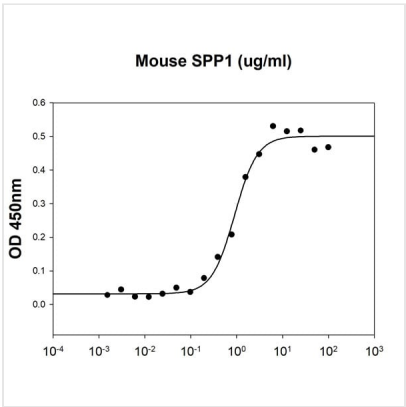
PRODUCT SYNONYMS

Osteopontin/OPN; Recombinant mouse Osteopontin/OPN protein; secreted phosphoprotein 1; 2AR; Ap1-1; BNSP; Bsp; BSP1; Eta; ETA-1; mi; OP; Opn; Opn1; Spp-1; osteopontine isoform 4; Bone sialoprotein 1; Calcium oxalate crystal growth inhibitor protein; Early T-lymphocyte activation 1 protein; Minopontin; Osteopontin; Spp1; OPN active protein

PRODUCT SPECIFICATIONS

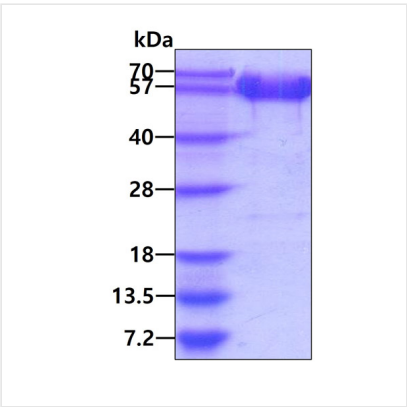
Host	HEK293
Purity/Purification	>90% by SDS-PAGE
Form/Format	Liquid. In Phosphate-Buffered Saline (pH7.4) containing 10% glycerol
Concentration	0.25mg/ml (determined by Absorbance at 280nm) (varies by lot)
Sequence Positions	17-294aa
Sequence	LPVKV TDSGSSEEL YSLHPDIAT WLVPDPSQKQ NLLAPQNAVS SEEKDDFKQE TLPSNSNESH DHMDDDDDDD DDDGDHAESE DSVDSDESDE SHHSDSEDET VTASTQADTF TPIVPTVDVP NGRGDSLAYG LRSKSRSFQV SDEQYPDATD EDLTSHMKSG ESKESLDVIP VAQLLSMPSD QDNNGKGSHE SSQLDEPSLE THRLEHSKES QESADQSDVI DSQASSKASL EHQSHKFHSH KDKLVLDPKS KEDDRYLKFR ISHELESSSS EVN
Applicable Applications for OPN active protein	Bioactivity, SDS-PAGE
Endotoxin	<1 EU per 1ug of protein (determined by LAL method)
Species	Mouse
Tag	His-Tag
Predicted N-term	Asp
Bioactivity	Measured by the ability of the immobilized protein to support the adhesion of HEK293 human embryonic kidney cells. When cells are added to mouse SPP1 coated plates. The ED50 range <= 1.5ug/ml.
Preparation and Storage	Can be stored at +2C to +8 degree C for 1 week. For long term storage, aliquot and store at -20C to -80 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



Bioactivity

Mouse SPP1 stimulates cell adhesion of the HEK293 human embryonic kidney cells. The ED50 range



SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

ADDITIONAL INFORMATION

Related Product Information for OPN active protein	Osteopontin, also known as SPP1, is major non-collagenous bone protein that binds tightly to hydroxyapatite. This protein appears to form an integral part of the mineralized matrix. It inhibits bone mineralization and kidney stone formation, and promotes inflammation and cell adhesion and migration. Osteopontin acts as a cytokine involved in enhancing production of interferon-gamma and interleukin-12 and reducing production of interleukin-10. Also it is essential in the pathway that leads to type 1 immunity. It is expressed and secreted by various cells, and has a role in cell adhesion, chemotaxis, prevention of apoptosis, invasion, migration and anchorage-independent growth of tumor cells. Recombinant mouse Osteopontin, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.
Product Categories/Family for OPN active protein	Angiogenesis; Cardiovascular; Adhesion & Movement; Proteins
References	Icer MA, et al, (2018) Clin Biochem. 51:17-24. Kaleta B. (2019) Inflamm Res. 68:93-102. Lamort AS, et al, (2019) Cells. 8:815.

NCBI AND UNIPROT INFORMATION

UniProt Accession #	P10923
Molecular Weight	31.8kDa (287aa)
UniProt Protein Name	Osteopontin
UniProt Gene Name	Spp1
UniProt Synonym Gene Names	Eta-1; Op; Spp-1; SPP-1
UniProt Entry Name	OSTP_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.