

Datasheet for ABIN6239742

Osteopontin Protein (AA 17-287) (His tag)[Go to Product page](#)**2** Images

Overview

Quantity:	50 µg
Target:	Osteopontin (SPP1)
Protein Characteristics:	AA 17-287
Origin:	Human
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This Osteopontin protein is labelled with His tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

Product Details

Characteristics:	Tag location: N-terminal His Tag
Purity:	> 95 %
Biological Activity Comment:	Osteopontin (OPN), a multifunctional phosphorylated glycoprotein, plays an important role in neutrophil recruitment and was found to induce the expression of proinflammatory chemokines including MCP-1 and MIP-1β which would promote migration and recruitment of inflammatory cells. It has been reported that OPN induces MCP-1 expression through the NF-kappa B pathways in MCF-7 breast cancer cell line. Briefly, MCF-7 cells were seeded overnight at a density of 1x10 ⁵ cells/mL, and treated with or without OPN(100ng/ml, 200ng/ml) for 24h and MCP-1 levels in the cell supernatant were determined by ELISA. MCP-1 levels in the cell supernatant of MCF-7 cells increased significantly after stimulated with OPN, the data was shown in Table 1 and Figure 1. Sample O.D. value Corrected Concentration of MCP-1(cell supernatant of MCF-7 cells) (ng/mL) stimulated with OPN (100ng/mL) 0.970 0.922 1.72

Product Details

stimulated with OPN (200ng/mL) 1.155 1.107 2.11 unstimulated 0.674 0.626 1.11 Table 1.
MCP-1 levels in the cell supernatant of MCF-7 cells regulated by OPN Figure 1. MCP-1 levels in the cell supernatant of MCF-7 cells regulated by OPN.

Target Details

Target:	Osteopontin (SPP1)
Alternative Name:	Osteopontin (OPN) (SPP1 Products)
Background:	Alternative Names: SPP1, BNSP, BSPI, ETA1, Secreted Phosphoprotein 1, Bone Sialoprotein I, Early T-Lymphocyte Activation 1, Nephropontin, Urinary stone protein, Uropontin
Molecular Weight:	60kDa
UniProt:	P10451
Pathways:	Regulation of Cell Size

Application Details

Application Notes:	Isoelectric Point: 4.3
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

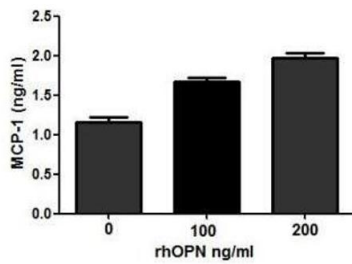


Figure 1. MCP-1 levels in the cell supernatant of MCF-7 cells regulated by OPN.

Image 1. Osteopontin (OPN), a multifunctional phosphorylated glycoprotein, plays an important role in neutrophil recruitment and was found to induce the expression of proinflammatory chemokines including MCP-1 and MIP-1 β which would promote migration and recruitment of inflammatory cells. It has been reported that OPN induces MCP-1 expression through the NF-kappa B pathways in MCF-7 breast cancer cell line. Briefly, MCF-7 cells were seeded overnight at a density of 1x10⁵ cells/mL, and treated with or without OPN(100ng/ml, 200ng/ml) for 24h and MCP-1 levels in the cell supernatant were determined by ELISA.

MCP-1 levels in the cell supernatant of MCF-7 cells increased significantly after stimulated with OPN, the data was shown in Table 1 and Figure 1.

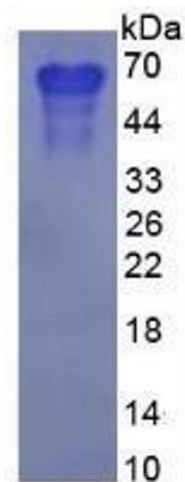


Image 2.