

Datasheet for ABIN6239750

Osteopontin Protein (AA 17-317) (His tag)

2 Images

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Overview

Quantity:	50 µg
Target:	Osteopontin (SPP1)
Protein Characteristics:	AA 17-317
Origin:	Rat
Source:	HEK-293 Cells
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:	<p>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 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 various concentrations of OPN 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 Concentration of MCP-1 O.D. value Corrected (cell supernatant of MCF-7 cells) (ng/mL) stimulated with OPN (100ng/mL) 1.358 1.305 2.53 stimulated with OPN</p>

Product Details

(200ng/mL) 1.177 1.124 2.15 stimulated with OPN (400ng/mL) 1.101 1.048 1.99 unstimulated
0.944 0.891 1.66 Table 1. MCP-1 levels in the cell supernatant of MCF-7 cells regulated by OPN
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.

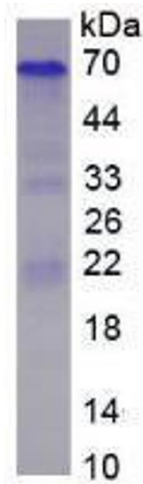


Image 1.

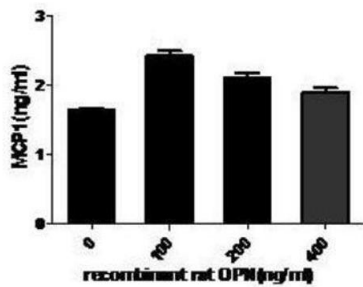


Figure 1. MCP-1 levels in the cell supernatant of MCF-7 cells regulated by OPN.

Image 2. 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 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 various concentrations of OPN 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.