

For Research Use Only

Recombinant Human Osteopontin protein (hFc Tag)



Catalog Number: Eg0696

Basic Information

Species:
Human

Purity:
>80 %, SDS-PAGE

Tag:
hFc Tag

EC50:
0.14 -0.56 μ g/mL

Technical Specifications

Purity:
>80 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Human Osteopontin protein Ile17-Asn300 (Accession# P10451-5) with a human IgG1 Fc tag at the C-terminus.

GenelD:
6696

Accession:
P10451-5

Predicted Molecular Mass:
59.5 kDa

SDS-PAGE:
85-95 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Human ITGAV (GST tag) at 1 μ g/mL (100 μ L/well) can bind Human Osteopontin (hFc tag) with a linear range of 0.14 -0.56 μ g/mL.

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Osteopontin (OPN), also known as SPP1, is a secreted glycoposphoprotein that belongs to the small integrin-binding ligand N-linked glycoprotein (SIBLING) family. Originally isolated from bone. OPN has been found in kidneys, vascular tissues, biological fluids, and various tumor tissues. It can interact with CD44 and integrins and regulate diverse biological processes. It has a multifaceted role in bone development and remodeling, and is also involved in the inflammatory and immune response, oncogenesis and cancer progression.

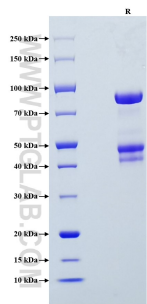
References

1. Denhardt DT, et al. (2001). J Clin Invest. 107(9):1055-61.
2. Fisher LW, et al. (2001). Biochem Biophys Res Commun. 280(2):460-5.
3. Rittling SR, et al. (2004). Br J Cancer. 90(10):1877-81.
4. Rangaswami H, et al. (2006). Trends Cell Biol. 16(2):79-87.

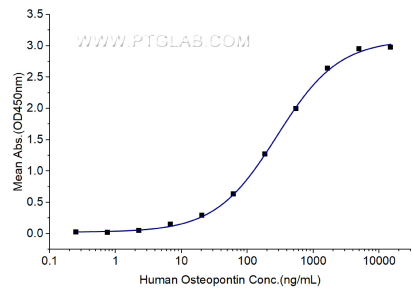
Synonyms

Osteopontin (OPN), OPN, BNSP, Bone sialoprotein 1, BSPI

Selected Validation Data



Purity of Recombinant Human Osteopontin was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.



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