

For Research Use Only

Recombinant Mouse Osteopontin protein (His Tag)



Catalog Number: Eg0317

Basic Information

Species:
Mouse

Purity:
>95 %, SDS-PAGE

Tag:
His Tag

EC50:
165-660 ng/mL

Technical Specifications

Purity:
>95 %, SDS-PAGE

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

Source:
HEK293-derived Mouse Osteopontin protein Leu17-Asn294 (Accession# Q547B5) with a His tag at the C-terminus.

GeneID:
20750

Accession:
Q547B5

Predicted Molecular Mass:
34.5 kDa

SDS-PAGE:
50-60 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 Mouse Osteopontin (His tag) at 0.5 μ g/mL (100 μ L/well) can bind Human ITGAV (GST tag) with a linear range of 165-660 ng/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.

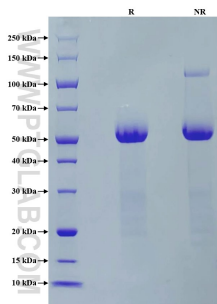
References

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.

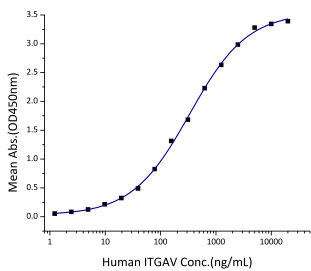
Synonyms

Spp1, Opn, Osteopontin

Selected Validation Data



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



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