

For Research Use Only

Recombinant Rat Osteopontin protein (mFc Tag) (HPLC verified)



Catalog Number: Eg3246

Basic Information

Species:
Rat

Purity:
>80 %, SDS-PAGE
 >90 %, SEC-HPLC

Tag:
mFc Tag

Technical Specifications

Purity:
>80 %, SDS-PAGE
 >90 %, SEC-HPLC

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Rat Osteopontin protein Leu17-Asn317 (Accession# P08721) with a mouse IgG Fc tag at the C-terminus.

GeneID:
25353

Accession:
P08721

Predicted Molecular Mass:
59.9 kDa

SDS-PAGE:
80-90 kDa, reducing (R) conditions

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

Biological Activity

Not tested

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 called secreted phosphoprotein 1 (SPP1), is encoded by the gene SPP1. OPN is a glycoprotein and presents different post-translational modifications according to the tissue of expression. OPN is a multifunctional phosphorylated protein involved in physiological and pathological events. Under physiological conditions, circulating and tissue OPN expression levels are relatively low, and OPN is suggested to play a key role in regulating biomineralization, wound healing, and developmental processes. Under pathological conditions, OPN is often significantly upregulated and exerts pleiotropic effects in several inflammatory, autoimmune, degenerative, fibrosis, and oncologic diseases, such as diabetes, stroke, kidney injury, cardiac fibrosis, and cancers.

References

- 1.Lamort AS. et al. (2019) Cells. 8(8):815.
- 2.Shirakawa K and Sano M. (2021) Biomolecules. 11(7):1047.
- 3.Yim A. et al. (2022) Immunol Rev. 311(1):224-233.
- 4.Lin EY. et al. (2023) Int Immunol. 35(4):171-180.
- 5.Jia Q. et al. (2024) Lung. 202(1):25-39.

Synonyms

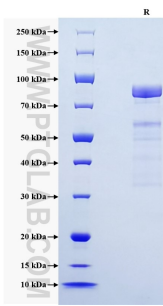
2b7, Bone sialoprotein 1, Secreted phosphoprotein 1, Spp1, SPP-1

For technical support and original validation data for this product please contact

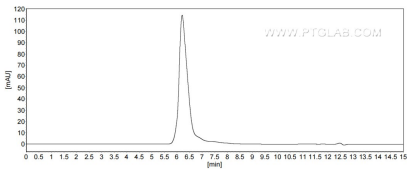
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Purity of Recombinant Human IL-3RB 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.



The purity of Rat Osteopontin was greater than 90% as determined by SEC-HPLC.