

Recombinant Rat Osteopontin protein (rFc Tag)

Catalog Number: Eg3247

Basic Information

Species:
Rat**Purity:**
>90 %, SDS-PAGE**Tag:**
rFc Tag

Technical Specifications

Purity:

>90 %, SDS-PAGE

Endotoxin Level:

<1.0 EU/ µg protein, LAL method

Source:

HEK293-derived Rat Osteopontin protein Leu17-Asn317 (Accession# P087211) with a rabbit IgG Fc tag at the C-terminus.

GeneID:

25353

Accession:

P08721

Predicted Molecular Mass:

59.5 kDa

SDS-PAGE:**Formulation:**

Lyophilized from sterile 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

Selected Validation Data

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

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