

Recombinant Human Osteopontin
Catalog # PBG10345**Specification**

Recombinant Human Osteopontin - Product Information**Recombinant Human Osteopontin - Additional Information****Description**

Osteopontin is a secreted glycoprotein that functions as a ligand to $\alpha v \beta 3$ integrin and possibly other receptors. It binds tightly to hydroxyapatite and can act as a structural component of the extracellular mineralized matrix. Osteopontin is initially secreted as a 298 amino acid protein, which is subject to multiple post-translational modifications including glycosylation, phosphorylation, and specific proteolytic cleavages into various smaller molecular weight fragments. Osteopontin is expressed in a wide range of cells and tissues including osteoblasts, various tumor cell lines, extraosseous cells in the inner ear, brain, kidney, deciduum, placenta and odontoblasts. In addition to its involvement in mineralized matrix formation, Osteopontin can also function as a cytokine that stimulates the release of IFN γ and IL-12, while inhibiting the production of IL-10. Recombinant human Osteopontin is a 298 amino acid protein, which, due to glycosylation, migrates at an apparent molecular weight of 60.0-65.0 kDa by SDS-PAGE analysis under reducing conditions.

Biological Activity

Determined by its ability to chemoattract human monocytes using a concentration range of 10.0-100.0 ng/ml.

Authenticity

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin

Endotoxin level is <0.1 ng/ μ g of protein (<1EU/ μ g).

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

Precautions

Recombinant Human Osteopontin is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human Osteopontin - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Recombinant Human Osteopontin - Images