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Recombinant Human Gremlin-1
Catalog # PBG10148

Specification

Recombinant Human Gremlin-1 - Product Information

Recombinant Human Gremlin-1 - Additional Information

Description
Gremlin-1 (isoform-1) belongs to a group of diffusible proteins which bind to ligands of the TGF-β family and regulate their activity by inhibiting their access to signaling receptors. The interplay between TGF-β ligands and their natural antagonists has major biological significance during development processes, in which cellular response can vary considerably depending upon the local concentration of the signaling molecule. Gremlin is highly expressed in the small intestine, fetal brain, and colon and lower expression in brain, prostate, pancreas and skeletal muscle. Gremlin-1 regulates multiple functions in early development by specifically binding to and inhibiting the function of BMP-2, -4, and -7. It also plays a role in carcinogenesis and kidney branching morphogenesis. Recombinant Gremlin-1 is a 18.3 kDa protein containing 160 amino acid residues.

BiologicalActivity
Determined by its ability to inhibit BMP-4 induced alkaline phosphatase production by ATDC-5 chondrogenic cells. The ED₅₀for this effect is 0.07-0.11 µg/ml.

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

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

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

Storage
-20°C

Precautions
Recombinant Human Gremlin-1 is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human Gremlin-1 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Human Gremlin-1 - Images