

Gremlin-1 Recombinant Protein | Grem1 recombinant protein

Mouse Gremlin-1

CATALOG # AAA79272	HOST E Coli	REACTIVITY Mouse
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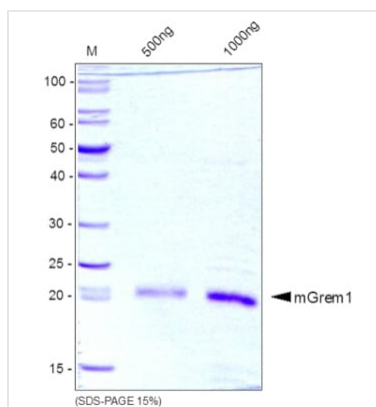
PRODUCT SYNONYMS

Gremlin-1; Mouse Gremlin-1; Recombinant Mouse Gremlin-1; Cell proliferation-inducing gene 2 protein; BMP antagonist 1; Grem1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Mouse
Form/Format	Sterile filtered protein solution was lyophilized from 50 mM acetic acid, free from stabilizers and preservatives
Sequence	MKKKGSQGAI PPPDKAQHND SEQTQSPPQP GSRTGRGQG RGTAMPGEEV LESSQEALHV TERKYLKRDW CKTQPLKQTI HEEGCNSRTI INRFCYGQCN SFYIPRHIRK EEGSFQSCSF CKPKKFTTMM VTLNCPQLQP PTKKKRVTRV KQCRCISIDL D
Sequence Length	161
Reconstitution	Centrifuge the vial prior to opening. The lyophilized Gremlin-1 should be reconstituted in 50 mM acetic acid to a concentration of 0.1 mg/mL. Store at 2°C to 8°C for up to a week or prepare for extended storage.
Preparation and Storage	After initial reconstitution, store working aliquots at -20 degree C to -80 degree C. Avoid repeated freeze/thaw cycles Product Form Temperature Storage Time Lyophilized -20°C to -80°C 1 year Lyophilized 2°C to 8°C 6 months Lyophilized Room Temperature 1 month Reconstituted 2°C to 8°C 1 week Extended Storage -20°C to -80°C 3 months

IMAGES



SDS-PAGE

SDS-PAGE analysis of recombinant mouse Gremlin-1. Samples were loaded in 15% SDS-polyacrylamide gel and stained with Coomassie blue. Lane 1: Molecular weight marker (kDa) Lane 2: 500ng Gremlin-1 Lane 3: 1000ng Gremlin-1.

ADDITIONAL INFORMATION

Related Product Information for Grem1 recombinant protein	Gremlin was identified in a Xenopus expression cloning screen as a dorsalizing factor that can induce a secondary axis. Gremlin/Drm belongs to the DAN family of secreted glycoproteins that are BMP antagonists. Other members of the family include: Cerberus, Dante, PRDC, Caronte and DAN. DAN family members share a cysteine-rich domain that is structurally related to the cysteine-knot motif found in TGFbeta superfamily ligands. In vitro, Gremlin/Drm binds BMP4 and BMP2 indicating that it might interfere with BMP signaling. Gremlin/Drm acts as a BMP2/ 4 antagonist in a variety of tissues and developmental processes including: Xenopus animal cap explants, chick limb bud outgrowth and chondrogenesis, murine lung branching morphogenesis, and osteogenic differentiation of mouse myoblasts and bone marrow stromal cells. In addition, expression of Gremlin/Drm has been shown to be down-regulated in a wide range of human cancer cell lines. Mouse, human, chick and Xenopus homologs of Gremlin share over 80% amino acid identity. It is likely that various DAN family members and other BMP antagonists including Noggin, Chordin, Follistatin and TSG can selectively antagonize the activities of different subsets of TGFbeta superfamily ligands.
Product Categories/Family for Grem1 recombinant protein	Cytokines & Growth Factors
References	1. Hsu DR et al, Mol Cell 1 (1998) 2. Merino R et al, Development 126 (1999) 3. Shi W et al, Am J Physiol 280 (2001) 4. Topol LZ et al, JBC 275 (2000).

NCBI AND UNIPROT INFORMATION

NCBI GI #	6754068
NCBI GeneID	23892
NCBI Accession #	NP_035954.1
NCBI GenBank Nucleotide #	NM_011824.4
UniProt Accession #	O70326
Molecular Weight	20.7 kDa
NCBI Official Full Name	gremlin-1
NCBI Official Synonym Full Names	gremlin 1
NCBI Official Symbol	Grem1
NCBI Official Synonym Symbols	Id; Drm; Grem; Cktsf1b1
NCBI Protein Information	gremlin-1; down-regulated in v-mos-transformed cells; cysteine knot superfamily 1, BMP antagonist 1; down-regulated in Mos-transformed cells protein
UniProt Protein Name	Gremlin-1
UniProt Gene Name	Grem1
UniProt Synonym Gene Names	Cktsf1b1; Drm
UniProt Entry Name	GREM1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.