

Datasheet for ABIN1589733 **GREM1 Protein**



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Overview

Quantity:	50 µg
Target:	GREM1
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Sequence:	MKKKGSQGAIPPPDKAQHNDSEQTQSPPQPGSRTRGRGQG RGTAMPGEEVLESSQEALHVTERKYLKRDWCKTQPLKQTI HEEGCNSRTIINRFCYGCNSFYIPRHIRKEEGSFQSCSF CKPKKFTTMMVTLNCPQLPPTKKKRVTRVKQCRCISIDL D
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Characteristics:	Length (AA): 161 Chromosomal location: 2 E4, 2 64.5 cM
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Purity:	> 95 % by SDS-PAGE. Visualized by silver stain
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Target Details

Target:	GREM1
Alternative Name:	Gremlin-1 (GREM1 Products)
Background:	Gremlin was identified in a Xenopus expression cloning screen as a dorsalizing factor that can induce a secondary axis. A rat homolog, called Drm, was identified as a cDNA that was down regulated in v Mos transfected cells. Gremlin/Drm belongs to the DAN family of secreted glycoproteins that are BMP antagonists. Other members of the family include: Cerberus, Dante,

Target Details

PRDC, Caronte and DAN. DAN family members share a cysteine-rich domain that is structurally related to the cysteine-knot motif found in TGFβ 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 TGFβ superfamily ligands.

Synonyms: Grem1, Id, Drm, Cktsf1b1

Molecular Weight:	20.7 kDa
NCBI Accession:	NM_011824 , NP_035954
UniProt:	O70326
Pathways:	Regulation of Muscle Cell Differentiation , Tube Formation , Maintenance of Protein Location

Application Details

Application Notes:	No biological data available at the moment.
Comment:	Cytokines & Growth Factors
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Mouse Grem-1 should be reconstituted in 50 mM acetic acid or water to a concentration of 0.1 mg/mL. This solution can be diluted in water or other buffer solutions or stored at -20 °C.
Buffer:	50 mM acetic acid
Storage:	0 °C
Storage Comment:	The lyophilized mouse Grem-1, though stable at room temperature, is best stored desiccated below 0 °C
