

Recombinant Mouse Grem2, His-tagged

Cat. No. Grem2-7387M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the mouse GREM1(Met1-Asp184) was expressed in Baculovirus, with a His tag at the C-terminus.
Species	Mouse
Source	Insect Cells
ProteinLength	1-184 a.a.
Description	GREM1 is a member of the DAN family. It contains 1 CTCK (C-terminal cystine knot-like) domain and is highly expressed in small intestine, fetal brain and colon. As a cytokine, GREM1 may play an important role during carcinogenesis and metanephric kidney organogenesis, as a BMP antagonist required for early limb outgrowth and patterning in maintaining the FGF4-SHH feedback loop. It interacts with SLIT1 and SLIT2 in a glycosylation-dependent manner and down-regulates the BMP4 signaling in a dose-dependent manner. Acts as inhibitor of monocyte chemotaxis. GREM1 also is an inhibitor in the TGF beta signaling pathway. It inhibits BMP-2, -4, and -7. Inhibition by grem 1 of BMPs in mice allow the expression of fibroblast growth factors (FGFs) 4 and 8 and Sonic hedgehog (SHH) which are necessary for proper limb development.
Predicted N Terminal	Lys 25
Form	Lyophilized from a 0.2μM filtered solution of 20mM Tris, 500mM NaCl, pH7.4,10% gly,0.5mM EDTA, 3mM DTT. Normally 5 % - 8 % trehalose and mannitol are added

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

as protectants before lyophilization.

Molecular Mass

The recombinant protein consists of 171 amino acids and has a calculated molecular mass of 19.7 kDa, migrates as an approximately 25 kDa band in SDS-PAGE under reducing conditions.

Endotoxin

1.0 eu/μg of the protein as determined by the lal

Purity

>97 % as determined by SDS-PAGE

Stability

Samples are stable for up to twelve months from date of receipt at -70°C

Storage

Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name

Grem2 gremlin 2 homolog, cysteine knot superfamily (Xenopus laevis) [Mus musculus]

Official Symbol

Grem2

Synonyms

GREM2; gremlin 2 homolog, cysteine knot superfamily (Xenopus laevis); gremlin-2; Gremlin1; protein related to DAN and cerberus; cysteine knot superfamily 1, BMP antagonist 2; Prdc; Gremlin2;

Gene ID

23893

mRNA Refseq

NM_011825

Protein Refseq

NP_035955

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Pathway	Signal Transduction, organism-specific biosystem; Signaling by BMP, organism-specific biosystem;
Function	cytokine activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA