

**GREM1, 25-184aa Human, His tag, E.coli**

**Cat.NO.: TP02332**

3th Edition

**Synonyms:** Gremlin-1 isoform 1, CKTSF1B1, DAND2, DRM, GREMLIN, IHG-2, PIG2

**Description:** GREM1 is a member of the BMP (bone morphogenic protein) antagonist family. Like BMPs, BMP antagonists contain cystine knots and typically form homo- and heterodimers. The CAN (cerberus and dan) subfamily of BMP antagonists, to which this protein belongs, is characterized by a C-terminal cystine knot with an eight-membered ring. The antagonistic effect of the secreted glycosylated protein is likely due to its direct binding to BMP proteins. As an antagonist of BMP, this protein may play a role in regulating organogenesis, body patterning, and tissue differentiation. In mouse, this protein has been shown to relay the sonic hedgehog (SHH) signal from the polarizing region to the apical ectodermal ridge during limb bud outgrowth. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. Recombinant human GREM1 protein, fused to His-tag at N-terminus, was expressed in E.coli.

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

**Molecular Weight:** 20.7 kDa (183aa)

**Sequences:**

MGSSHHHHHSSGLVPRGSHMGSKKKGSQGAIPPPDKAQHNDSEQTQSPQQPGSRNRGRGQGRGTAMPGEEV  
LESSQEALHVTERKYLKRDWCKTQPLKQTIHEEGCNSRTIINRFCYGCNSFYIPRHIRKEEGSFQSCSFCKPKKFT  
TMMVTLNCPQLPPTKKKRVTRVKQCRCISIDL

**Purity:** > 95% by HPLC

**Concentration:** 0.5 mg/ml (determined by Bradford assay)

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.