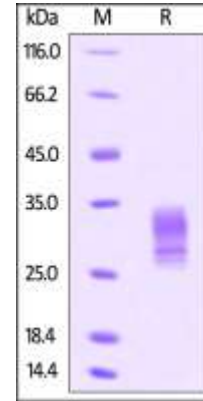


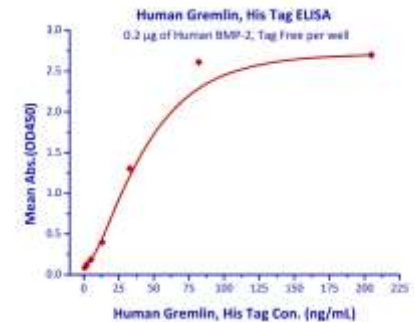
## Human CellExp™ Gremlin / GREM1, Human recombinant

<b>CATALOG NO:</b>	P1124-10      10 µg P1124-50      50 µg
<b>ALTERNATE NAMES:</b>	GREM1, CKTSF1B1, DAND2, DRM, PIG2
<b>SOURCE:</b>	HEK 293 cells (Lys 25 – Asp 184)
<b>PURITY:</b>	> 95% by SDS – PAGE
<b>MOL. WEIGHT:</b>	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 20.2 kDa. The protein migrates as 28-35 kDa on a SDS-PAGE gel under reducing (R) condition due to glycosylation.
<b>ENDOTOXIN LEVEL:</b>	< 1.0 EU per 1µg of protein (determined by LAL method)
<b>FORM:</b>	Lyophilized
<b>FORMULATION:</b>	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Generally Mannitol or Trehalose is added as a protectant before lyophilization.
<b>STORAGE CONDITIONS:</b>	Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.
<b>RECONSTITUTION:</b>	Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration of 50 µg/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% (W/V) HSA or BSA) is recommended for further dilution and long term storage. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -80°C.
<b>DESCRIPTION:</b>	Gremlin is also known as Cysteine knot superfamily 1, BMP antagonist 1 (CKTSF1B1), DAN domain family member 2 (DAND2), Down-regulated in Mos-transformed cells protein (DRM), Increased in high glucose protein 2 (IHG-2), Cell proliferation-inducing gene 2 protein (PIG2) or Gremlin-1 (GREM1), which is highly expressed in small intestine, fetal brain and colon. Gremlin / GREM-1 interacts with SLIT1 and SLIT2 in a glycosylation-dependent manner. Gremlin 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. Gremlin down-regulates the BMP4 signaling in a dose-dependent manner and acts as inhibitor of monocyte chemotaxis.

**BIOACTIVITY:** Measured by its binding ability in a functional ELISA. Immobilized Human BMP-2, Tag Free at 2µg/mL (100 µL/well) can bind Human Gremlin, His Tag with a linear range of 0.8-81.9 ng/mL.



The purity of Human Gremlin, His tag was determined by DTT-reduced (+) SDS-PAGE and staining overnight with Coomassie Blue.



Immobilized Human BMP-2, at 2 µg/mL (100 µL/well) can bind Human Gremlin, His Tag with a linear range of 0.8-81.9 ng/mL.

### RELATED PRODUCT:

- Human CellExp™ CCL6, mouse recombinant (Cat. No. 7226-10, -50)
- Human CellExp™ CD155, human recombinant (Cat. No. 7462-10, -50)
- Human CellExp™ CD160/BY55, human recombinant (Cat. No. 7386-10, -50)
- Human CellExp™ CD166/ ALCAM, human recombinant (Cat. No. 7437-10, -50)
- Human CellExp™ CD172A / SIRP, human recombinant (Cat. No. 7506-10, -50)
- Human CellExp™ CD33 / SIGLEC-3, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD47, human recombinant (Cat. No. 7385-10, -50)
- Human CellExp™ CD55/DAF, human recombinant (Cat. No. 7432-10, -50)
- Human CellExp™ CD58 /LFA-3, human recombinant (Cat. No. 7427-10, -50)
- Human CellExp™ CD62E/E-Selectin, human recombinant (Cat. No. 7434-20, -100)
- Human CellExp™ CD71 / TFRC / TFR, human recombinant (Cat. No. 7279-10, -50)
- Human CellExp™ CD273, human recombinant (Cat. No. 7369-10, -50)
- Human CellExp™ CD36, human recombinant (Cat. No. 7371-10, -50)

**FOR RESEARCH USE ONLY! Not to be used on humans.**