

Gremlin-1, human recombinant protein
CKTSF1B1, DAND2, DRM, IHG-2
Catalog # PBV10789r**Specification**

Gremlin-1, human recombinant protein - Product info

Primary Accession [O70326](#)
Calculated MW **18.3 kDa** KDa

Gremlin-1, human recombinant protein - Additional Info

Gene ID	23892
Gene Symbol	Grem1
Other Names	
CKTSF1B1, DAND2, DRM, IHG-2	
Gene Source	Human
Source	CHO cells
Assay&Purity	SDS-PAGE; ≥90%
Assay2&Purity2	HPLC;
Recombinant	Yes
Sequence	KKKGSQGAIP PPDKAQHNDSEQTQSPQQPG SRNRGRGQGR GTAMPGEEVL ESSQEALHVT ERKYLKRDWC KTQPLKQTIH EEGCNSRTII NRFCYGQCNS FYIPRHIRKE EGSFQSCSFC KPKKFTTMMV TLNCPQLQPP TKKKRVTRVK QCRCISIDL

Target/Specificity
Gremlin-1

Application Notes

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format

Lyophilized powder

Storage

-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.5 and 150 mM NaCl.

Gremlin-1, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Gremlin-1, human recombinant protein - Images

Gremlin-1, human recombinant protein - Background

Gremlin-1 (isoform-1) belongs to a group of diffusible proteins which bind to ligands of the TGF- β family and regulate their activity by inhibiting their access to signaling receptors. The interplay between TGF- β ligands and their natural antagonists has major biological significance during development processes, in which cellular response can vary considerably depending upon the local concentration of the signaling molecule. Gremlin is highly expressed in the small intestine, fetal brain, and colon and lower expression in brain, prostate, pancreas and skeletal muscle. Gremlin-1 regulates multiple functions in early development by specifically binding to and inhibiting the function of BMP-2, -4, and -7. It also plays a role in carcinogenesis and kidney branching morphogenesis. Recombinant Gremlin-1 is an 18.3 kDa protein containing 160 amino acid residues.

Gremlin-1, human recombinant protein - References

Hsu D.R., et al. Mol. Cell 1:673-683(1998).
Zhang Q., et al. Cytogenet. Cell Genet. 89:242-251(2000).
Khokha M.K., et al. Nat. Genet. 34:303-307(2003).
Pangas S.A., et al. J. Biol. Chem. 279:32281-32286(2004).
Michos O., et al. Development 131:3401-3410(2004).