



Recombinant Rat Gremlin-1 (Grem1)

Product Code	CSB-EP009892RA-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	O35793
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	≥85% (SDS-PAGE)
Sequence	KKKGSQ GAIPPPDKAQ HNDSEQTQSP PQPGRSTRGR GQGRGTAMPG EEVLESSQEA LHVTERKYLK RDWCKTQPLK QTIHEEGCNS RTIINRFCYG QCNSFYIPRH IRKEEGSFQS CSFCKPKKFT TMMVTLNCPE LQPPTKKKRV TRVKQCRCIS IDLD
Source	E.coli
Target Names	Grem1
Protein Names	Recommended name: Gremlin-1 Alternative name(s): Cysteine knot superfamily 1, BMP antagonist 1 Down-regulated in Mos-transformed cells protein
Expression Region	25-184
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This gene encodes 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 gene belongs, is characterized by a C-terminal cystine knot with an eight-membered ring. The antagonistic effect of the secreted glycosylated protein encoded by this gene is likely due to its direct binding to BMP proteins. As an antagonist of BMP, this gene 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.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.