

Gremlin-1 Human Chinese Hamster Ovary Cells (CHO)

Product Data Sheet

Type: Recombinant	Cat. No.:	
Source: Chinese Hamster Ovary Cells (CHO)	RBG10169010	(10 µg)
Species: Human	RBG10169050	(50 µg)
Other names: CKTSF1B1, DAND2, DRM, IHG-2	RBG10169100	(100 µg)

Description

Gremlin-1 (isoform-1) belongs to a group of diffusible proteins that bind to ligands of the TGF-beta family and regulate their activity by inhibiting their access to signaling receptors. The interplay between TGF-beta 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-1 is highly expressed in the small intestine, fetal brain, and colon; and is expressed at lower levels in the brain, prostate, pancreas, and in 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 Human Gremlin-1 is a 18.3 kDa protein containing 160 amino acid residues.

Research topic

Bone and cartilage metabolism, Oncology

Amino Acid Sequence

KKKGSQGAIP PDKAQHNS EQTQSPQQPG SRNRGRGQGR GTAMPGEEVL ESSQEALHVT ERKYLKRDWC KTQPLKQTIH
EEGCNSRTII NRFYCYQCNS FYIPRHIRKE EGSFQSCSFC KPKKFTTMMV TLNCPQLQPP TKKKRVTRVK QCRCISIDLD

Source

Chinese Hamster Ovary Cells (CHO)

Purity

90%

Biological Activity

Determined by its ability to inhibit BMP-4 induced alkaline phosphatase production by ATDC-5 chondrogenic cells. The ED₅₀ for this effect is 0.07-0.11 µg/ml.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. 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.

Storage, Stability/Shelf Life

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