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Datasheet for ABIN2722232

GREM1 Protein (Transcript Variant 1)

Overview

Quantity:	50 µg
Target:	GREM1
Protein Characteristics:	Transcript Variant 1
Origin:	Human
Source:	CHO Cells
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Functional Studies (Func), Antibody Production (AbP), Protein Interaction (PI), Standard (STD)

Product Details

Specificity:	Optimal preservation of protein structure, post-translational modifications and functions.
Characteristics:	<ul style="list-style-type: none">• Recombinant human Gremlin-1 / GREM1 (transcript variant 1) protein expressed in CHO cells.• Produced with end-sequenced ORF clone• Tested for bioactivity.
Purity:	> 90 % as determined by SDS-PAGE and Coomassie blue staining
Endotoxin Level:	Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).
Biological Activity Comment:	Determined by its ability to inhibit BMP-4 induced alkaline phosphatase production by ATDC-5 chondrogenic cells. The ED50 for this effect is 0.07-0.11ug/mL.

Target Details

Target:	GREM1
Alternative Name:	Gremlin-1,grem1 (GREM1 Products)
Background:	<p>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. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.</p>
Molecular Weight:	18.3 kDa
NCBI Accession:	NP_037504
Pathways:	Regulation of Muscle Cell Differentiation, Tube Formation, Maintenance of Protein Location

Application Details

Application Notes:	<p>Recombinant human proteins can be used for:</p> <ul style="list-style-type: none">Native antigens for optimized antibody productionPositive controls in ELISA and other antibody assaysProtein-protein interactionIn vitro biochemical assays and cell-based functional assays
Restrictions:	For Research Use only

Handling

Buffer:	Lyophilized from a 0.2 µM filtered solution of 20 mM phosphate buffer, 100 mM NaCl, pH 7.2
Handling Advice:	Resuspend the protein in the desired concentration in proper buffer
Storage:	-80 °C
Storage Comment:	Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.