

Product datasheet

Recombinant human Gremlin 1 protein ab139770

Description

Product name	Recombinant human Gremlin 1 protein	
Biological activity	Determined by its ability to inhibit BMP-4 induced alkaline phosphatase production by ATDC-5 chondrogenic cells. The ED ₅₀ for this effect is 0.07-0.11 µg/ml.	
Purity	> 90 % SDS-PAGE. The purity of ab139770 is greater than 90% by SDS-PAGE gel and HPLC analyses.	
Expression system	CHO cells	
Accession	O60565	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	KKKGSQGAIP PPDKAQHNS EQTQSPQQPG SRNRGRGQGR GTAMPGEEVL ESSQEALHVT ERKYLKRDWC KTQPLKQTIH EEGCNSRTII NRFCYGGCNS FYIPRHIRKE EGSFQSCSFC KPCKFTTMMV TLNCELPQPP TKKKRVTRVK QCRCISIDLD	
Predicted molecular weight	18 kDa	
Amino acids	25 to 184	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab139770** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies
	HPLC
	SDS-PAGE
Form	Lyophilized

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Constituents: 0.16% Sodium phosphate, 0.29% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.
General Info	
Function	Cytokine that 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. Down-regulates the BMP4 signaling in a dose-dependent manner. Acts as inhibitor of monocyte chemotaxis.
Tissue specificity	Highly expressed in small intestine, fetal brain and colon. Expression is restricted to intestinal subepithelial myofibroblasts (ISEMFs) at the crypt base. In subjects with HMPS1, by contrast, GREM1 is expressed, not only in basal ISEMFs, but also at very high levels in epithelial cells (predominantly colonocytes), with expression extending most of the way up the sides of the crypt. Weakly expressed in brain, ovary, prostate, pancreas and skeletal muscle. In brain found in the region localized around the internal capsule in the large subcortical nuclei, including caudate, putamen, substantia nigra, thalamus and subthalamus. Predominantly expressed in normal cells including neurons, astrocytes and fibroblasts.
Involvement in disease	Polyposis syndrome, mixed hereditary 1
Sequence similarities	Belongs to the DAN family. Contains 1 CTCK (C-terminal cystine knot-like) domain.
Cellular localization	Secreted.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors