

Datasheet for ABIN7553826 **EXTL3 Protein (AA 1-919) (His tag)**



Overview

Quantity:	1 mg
Target:	EXTL3
Protein Characteristics:	AA 1-919
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EXTL3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant EXTL3 Protein expressed in mammalian cells.
Sequence:	MTGYTMLRNG GAGNGGQTCM LRWSNRIRLT WLSFTLFVIL VFFPLIAHYY LTTLDEADEA
	GKRIFGPRVG NELCEVKHVL DLCRIRESVS EELLQLEAKR QELNSEIAKL NLKIEACKKS
	IENAKQDLLQ LKNVISQTEH SYKELMAQNQ PKLSLPIRLL PEKDDAGLPP PKATRGCRLH
	NCFDYSRCPL TSGFPVYVYD SDQFVFGSYL DPLVKQAFQA TARANVYVTE NADIACLYVI
	LVGEMQEPVV LRPAELEKQL YSLPHWRTDG HNHVIINLSR KSDTQNLLYN VSTGRAMVAQ
	STFYTVQYRP GFDLVVSPLV HAMSEPNFME IPPQVPVKRK YLFTFQGEKI ESLRSSLQEA
	RSFEEEMEGD PPADYDDRII ATLKAVQDSK LDQVLVEFTC KNQPKPSLPT EWALCGERED
	RLELLKLSTF ALIITPGDPR LVISSGCATR LFEALEVGAV PVVLGEQVQL PYQDMLQWNE
	AALVVPKPRV TEVHFLLRSL SDSDLLAMRR QGRFLWETYF STADSIFNTV LAMIRTRIQI
	PAAPIREEAA AEIPHRSGKA AGTDPNMADN GDLDLGPVET EPPYASPRYL RNFTLTVTDF
	YRSWNCAPGP FHLFPHTPFD PVLPSEAKFL GSGTGFRPIG GGAGGSGKEF QAALGGNVPR
	EQFTVVMLTY EREEVLMNSL ERLNGLPYLN KVVVVWNSPK LPSEDLLWPD IGVPIMVVRT

	EKNSLNNRFL PWNEIETEAI LSIDDDAHLR HDEIMFGFRV WREARDRIVG FPGRYHAWDI
	PHQSWLYNSN YSCELSMVLT GAAFFHKYYA YLYSYVMPQA IRDMVDEYIN CEDIAMNFLV
	SHITRKPPIK VTSRWTFRCP GCPQALSHDD SHFHERHKCI NFFVKVYGYM PLLYTQFRVD
	SVLFKTRLPH DKTKCFKFI Sequence without tag. The proposed Purification-Tag is based on
	experiences with the expression system, a different complexity of the protein could make
	another tag necessary. In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	 Made to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalian cells and purified in one-step affinity chromatography The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. State-of-the-art algorithm used for plasmid design (Gene synthesis).
	This protein is a made-to-order protein and will be made for the first time for your order. Our
	experts in the lab try to ensure that you receive soluble protein.
	If you are not interested in a full length protein, please contact us for individual protein fragments.
	The big advantage of ordering our made-to-order proteins in comparison to ordering custom
	made proteins from other companies is that there is no financial obligation in case the protein
	cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made
Target Details	
Target:	EXTL3
Alternative Name:	EXTL3 (EXTL3 Products)
Background:	Exostosin-like 3 (EC 2.4.1.223) (EXT-related protein 1) (Glucuronyl-galactosyl-proteoglycan 4-
	alpha-N-acetylglucosaminyltransferase) (Hereditary multiple exostoses gene isolog) (Multiple
	exostosis-like protein 3) (Putative tumor suppressor protein EXTL3),FUNCTION:
	Glycosyltransferase which regulates the biosynthesis of heparan sulfate (HS)

acetyl-alpha-D-glucosamine (alpha-GlcNAc) residue (GlcNAcT-I activity) to the tetrasaccharide linker (GlcA-Gal-Gal-Xyl-)Ser core linker (PubMed:11390981, PubMed:35676258). May also transfer alpha-GlcNAc residues during HS elongation (GlcNAcT-II activity) (PubMed:11390981, PubMed:35676258). Lacks glucuronyl transferase II (GlcAT-II) activity (PubMed:11390981, PubMed:35676258). Important for both skeletal development and hematopoiesis, through the formation of HS proteoglycans (HSPGs) (PubMed:28132690, PubMed:28148688, PubMed:11390981, PubMed:22727489, PubMed:35676258). Through the synthesis of HS, regulates postnatal pancreatic islet maturation and insulin secretion (By similarity). {ECO:0000250|UniProtKB:Q9WVL6, ECO:0000269|PubMed:11390981, ECO:0000269|PubMed:28132690, ECO:0000269|PubMed:28148688, ECO:0000269|PubMed:35676258}., FUNCTION: Receptor for REG3A. REG3B and REG3G, induces the activation of downstream signaling pathways such as

ECO:0000269|PubMed:28148688, ECO:0000269|PubMed:35676258}., FUNCTION: Receptor for REG3A, REG3B and REG3G, induces the activation of downstream signaling pathways such as PI3K-AKT or RAS-RAF-MEK-ERK signaling pathway (PubMed:22727489, PubMed:34099862, PubMed:27830702). Required for the function of REG3A in regulating keratinocyte proliferation and differentiation (PubMed:22727489). Required for the inhibition of skin inflammation mediated by REGA through the activation of PI3K-AKT-STAT3 pathway (PubMed:27830702). Required for the function of REGA and REG3G in glucose tolerance in pancreas (PubMed:19158046). Expressed in microglia, is activated by nociceptor-derived REG3G in response to endotoxins, leading to the inhibition of kynurenine pathway to prevent endotoxic death (By similarity). {ECO:0000250|UniProtKB:Q9WVL6, ECO:0000269|PubMed:19158046, ECO:0000269|PubMed:22727489, ECO:0000269|PubMed:27830702, ECO:0000269|PubMed:34099862}.

Molecular Weight: 104.7 kDa

UniProt: 043909

Pathways: Glycosaminoglycan Metabolic Process, ER-Nucleus Signaling

Application Details

Application Notes:

We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

Handling

Format: Liquid

Handling

Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months