

Active Recombinant Human FAM20B protein, HA-tagged

Cat. No. FAM20B-1024H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human FAM20B(Asn27-Leu409) fused with HA tag at N-terminal was expressed in CHO.
Species	Human
Source	CHO
ProteinLength	Asn27-Leu409
Description	FAM20B is a member of the FAM20 protein family that has three members in mammals (FAM20A, FAM20B, FAM20C). Human FAM20B shares 97% amino acid sequence identity with mouse and rat FAM20B. FAM20B localizes to the Golgi apparatus where it phosphorylates the xylose residue in the glycosaminoglycan (GAG)-protein linkage region of proteoglycans, which leads to enhanced GAG biosynthesis. Accordingly, chondroitin sulfate and heparan sulfate production is increased when FAM20B is over-expressed and reduced following FAM20B knockdown. FAM20B knockout mice display embryonic lethality at day E13.5, suggesting that FAM20B has an important role during development. Furthermore, in zebrafish, FAM20B mutations result in reduced cartilage matrix production and skeletal defects. The enzymatic activity of recombinant human FAM20B is measured using a phosphatase-coupled method.
Predicted N Terminal	Tyr
Form	Lyophilized from a 0.2

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	µm filtered solution in Tris and NaCl.
Bio-activity	Measured by its ability to enhance survival of ATDC5 mouse chondrogenic cells. The ED50 for this effect is typically 0.8-4 µg/mL. Measured by its ability to phosphorylate D-xylose. The specific activity is >15 pmol/min/µg, as measured under the described conditions.
Molecular Mass	Predicted Molecular Mass: 44 kDa; SDS-PAGE: 44-53 kDa, reducing conditions.
Endotoxin	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE with silver staining
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 500 µg/mL in 25 mM Tris-HCl, pH7.5.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

GENE INFORMATION

Gene Name	FAM20B family with sequence similarity 20, member B [Homo sapiens]
Official Symbol	FAM20B
Synonyms	gxl1

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Gene ID	9917
mRNA Refseq	NM_014864.3
Protein Refseq	NP_055679.1
MIM	611063
UniProt ID	O75063

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