

Product datasheet for **MG206431**

Fam20b (NM_145413) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fam20b (NM_145413) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Fam20b
Synonyms:	C530043G21 Rik; mKIAA0475
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG206431 representing NM_145413 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGCTGAAGCAGCGAGTTGTGCTGTTAGCAATACTCCTCGTCATTTTATCTTCACCAAAGTTTCC
 TGATAGACAATTTAGATACATCAGCTGCCAACCGAGAGGACCAGAGGGCTTTTCACCGAATGATGACTGG
 CTTGCGGGTGGAGCTGGTGCCCAAGTTGGACCATACCCTGCAGTCTCCTGGGAGATTGCAGCCAGTGG
 GTGGTGCCCGGGAAGTGATCCTGAAGAGACACCAGAGCTGGGAGCAATCATGCATGCCATGGCCACTA
 AGAAAATCATTAAAGCTGACGTGGGCTATAAAGGGACACAGCTAAAAGCTTTACTGATTCTGAAGGAGG
 ACAGAAAGTTGTCTTTAAGCCTAAGCGGTACAGCAGAGACTATGTGGTAGAAGGGGAGCCATACGCTGGT
 TATGACAGACACAATGCAGAGGTGGCGGCTTCCATTTGGACAGGATTCTGGGTTTCCGCCGCGCTCCCT
 TGGTGGTGGGCAGATATGTTAATCTGCGGACAGAAGTTAAGCCTGTTGCCACGGAGCAGCTGCTGAGCAC
 CTTCTAACTGTAGGGAACAATACTTGTCTATGGGAAGTGCTACTACTGCCGAGAAACAGAGCCAGCA
 TGTGCTGACGGTGACATGATGGAGGGCTCTGTCACTTTGGCTTCCAGATGTGTGGCCTCTGCAGAAAC
 ATCGACATCCCTGGGCGAGGACCTACCGAGAAGGCAAACTGGCCAGGTGGGAATATGATGAGAGCTACTG
 CGATGCTGTGAAGAAAACATCCCCCTATGACTCAGGCCCGCGTCTCCTGGACATCATTGACACGGCTGTC
 TTTGATTACTTGATTGGCAATGCTGATCGCCATCACTACGAGAGCTTTCAAGATGATGAAGGCGCGAGCA
 TGCTTATTCTTCTTGATAATGCCAAAAGCTTTGGAAACCCTCGCTGGATGAGAGAAGCATTCTTGCCCC
 TCTCTATCAGTGTTGCATCATTCGGGTTTCAACCTGGAATAGACTGAATTATCTAAAGAATGGAGTACTA
 AAGTCTGCCTTAAATCTGCCATGGCCCATGACCCCATCTCCCCTGTGCTCTCCGATCCACACTTGGACA
 CTGTGGACCAGCGGCTTCTGAATGTCTTGGCCACCATCAAGCAGTGTACTGACCAAGTTTGGGACGGATAC
 TGTGCTGGTGAAGACAGGATGCCACTCTCCCACTTG

ACGCGTACGCGGCGGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG206431 representing NM_145413
 Red=Cloning site Green=Tags(s)

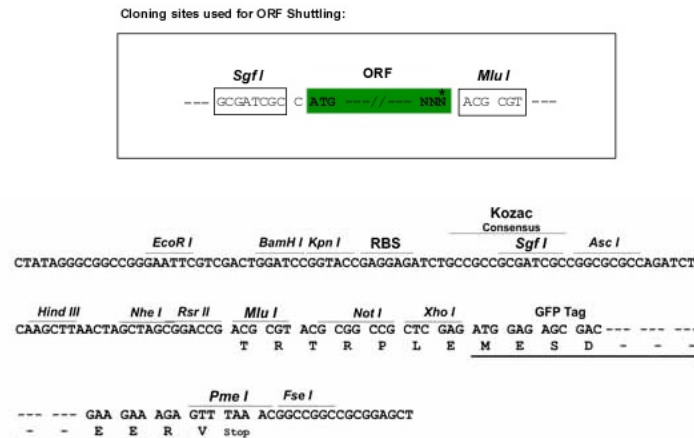
MKLKQRVVLLAILLVIFITKVFLIDNLDTSANREDQRAFHMMTGLRVELVPKLDHTLQSPWEIAAQW
 VVPREVPEETPELGAIMHAMATKKIIKADVGYKGTQLKALLILEGGQKVVFVKPKRYSRDYVVEGEPYAG
 YDRHNAEVAAFHLDRI LGFRRAPLVVGRYVNLRTVEKPVATEQLLSTFLTVGNNTCFYGKCYCRETEPA
 CADGDMMEGSVTLWLPDVWPLQKHRHPWGRITYREGKLARWEYDESYCDVKKTSFYDSSGPRLLDIIDTAV
 FDYLIGNADRHYESFQDDEGASMLILLDNAKSFGNPSLDERSLAPLYQCCIIRVSTWNRLNLYLKNLGV
 KSALKSAMAHDPISPVLSDPHLDTVDQRLNLVLAITKQCTDQFGTDTVLVEDRMPLSHL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_145413

ORF Size: 1227 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_145413.4, NP_663388.1</u>
RefSeq Size:	4238 bp
RefSeq ORF:	1230 bp
Locus ID:	215015
UniProt ID:	<u>Q8VCS3</u>
Cytogenetics:	1 G3
Gene Summary:	Responsible for the 2-O-phosphorylation of xylose in the glycosaminoglycan-protein linkage region of proteoglycans thereby regulating the amount of mature GAG chains. Sulfated glycosaminoglycans (GAGs), including heparan sulfate and chondroitin sulfate, are synthesized on the so-called common GAG-protein linkage region (GlcUA β 1-3Gal β 1-3Gal β 1-4Xyl β 1-O-Ser) of core proteins, which is formed by the stepwise addition of monosaccharide residues by the respective specific glycosyltransferases. Xylose 2-O-phosphorylation may influence the catalytic activity of B3GAT3 (GlcAT-I) which completes the precursor tetrasaccharide of GAG-protein linkage regions on which the repeating disaccharide region is synthesized.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG206431