

## Product datasheet for RC210361

### Galactoside 2 alpha L fucosyltransferase 1 (FUT1) (NM\_000148) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Galactoside 2 alpha L fucosyltransferase 1 (FUT1) (NM_000148) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Galactoside 2 alpha L fucosyltransferase 1
Synonyms:	H; HH; HSC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210361 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTGGCTCCGGAGCCATCGTCAGCTCTGCCTGGCCTTCTGCTAGTCTGTGTCTCTCTGTAATCTTCT  
TCCTCCATATCCATCAAGACAGCTTCCACATGGCCTAGGCCTGTCGATCCTGTGTCCAGACCGCCGCT  
GGTGACACCCCACTGGCCATCTTCTGCCTGCCGGTACTGCGATGGGCCCAACGCCTCTTCTCTGT  
CCCCAGCACCCCTGCTTCCCTCTCCGGCACCTGGACTGTCTACCCCAATGGCCGGTTTGGTAATCAGATGG  
GACAGTATGCCAGCTGTGGCTCTGGCCAGCTCAACGGCCCGCCGGCCTTTATCCTGCCTGCCATGCA  
TGCCGCCCTGGCCCGGTATTCCGCATCACCTGCCCGTGTGGCCCAAGAGTGACAGCCGACGCCG  
TGGCGGGAGCTGCAGCTTACGACTGGATGTCCGGAGGAGTACGGGACTTGAGAGATCCTTCTGAAGC  
TCTCTGGCTTCCCTGCTCTTGGACTTTCTTCCACCATCTCCGGGAACAGATCCGCAGAGAGTTCACCC  
GCACGACCACCTTCGGGAAGAGGCGCAGAGTGTGCTGGGTGAGCTCCGCCTGGGCCGACAGGGGACCGC  
CCGCGCACCTTTGTGGCGTCCACGTGCCCGTGGGGACTATCTGAGGTTATGCCTCAGCGCTGGAAGG  
GTGTGGTGGGCGACAGCGCTACCTCCGGCAGGCCATGGACTGGTTCCGGGCACGGCACGAAGCCCCCGT  
TTTCGTGGTCACCAGCAACGGCATGGAGTGGTGTAAAGAAAACATCGACACCTCCAGGGCGATGTGACG  
TTTGTGGCGATGGACAGGAGGCTACACCGTGGAAAGACTTTGCCCTGCTCACACAGTGAACACACCA  
TTATGACCATTGGCACCTTCGGCTTCTGGCTGCCTACCTGGCTGGCGGAGACACTGTCTACCTGGCCAA  
CTTCACCTGCCAGACTCTGAGTTCTGAAGATCTTTAAGCCGGAGGCGGCTTCTGCCGAGTGGGTG  
GGCATAATGCAGACTTGTCTCCACTCTGGACATTGGCTAAGCCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



[View online »](#)

**Protein Sequence:** >RC210361 protein sequence  
Red=Cloning site Green=Tags(s)

MWLRSHRQLCLAFLLVCVLSVIFFLHHIQDSFPHGLGLSILCPDRRLVTPPVAIFCLPGTAMGPNASSSC  
 PQHPASLSGTWTVYPNGRFGNQMGQYATLLALAQLNGRRRAFILPAMHAALAPVFRITLPVLAPEVDSRTP  
 WRELQLHDWMSEEYADLRDPFLKLSGFPCSWTFHHHLREQIRREFTLHDHLREEAQSVLGQLRLGRTGDR  
 PRTFVGVHVRRGDYLQVMPQRWKGVVGDSAYLRQAMDWFRARHEAPVFVVT SNGMEWCKENIDTSQGDVT  
 FAGDGQEATPWKDFALLTQCNHTIMTIGTFGFWAAYLAGGDVTVYLANFTLPDSEFLKIFKPEAAFLPEW  
 GINADLSPLWTLAKP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6379\\_g01.zip](https://cdn.origene.com/chromatograms/mk6379_g01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_000148

**ORF Size:** 1095 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.

**RefSeq:** [NM\\_000148.4](#)

**RefSeq Size:** 4246 bp

**RefSeq ORF:** 1098 bp

**Locus ID:** 2523

**UniProt ID:** [P19526](#)

**Cytogenetics:** 19q13.33

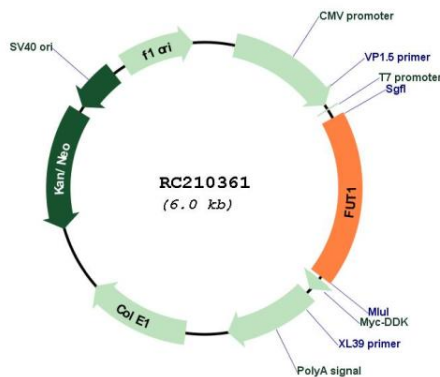
**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Glycosphingolipid biosynthesis - globo series, Glycosphingolipid biosynthesis - lacto and neolacto series, Metabolic pathways

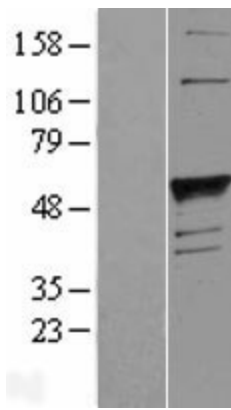
**MW:** 41.3 kDa

**Gene Summary:** This gene encodes a Golgi stack membrane protein that is involved in the creation of a precursor of the H antigen, which is required for the final step in the synthesis of soluble A and B antigens. This is one of two genes encoding the galactoside 2-L-fucosyltransferase enzyme. Mutations in this gene are a cause of the H-Bombay blood group. [provided by RefSeq, Aug 2016]

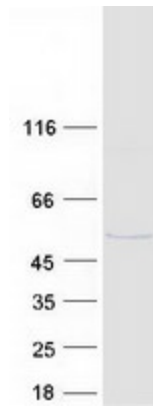
**Product images:**



Circular map for RC210361



Western blot validation of overexpression lysate (Cat# [LY424898]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210361 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FUT1 protein (Cat# [TP310361]). The protein was produced from HEK293T cells transfected with FUT1 cDNA clone (Cat# RC210361) using MegaTran 2.0 (Cat# [TT210002]).