

Product datasheet for RC202206

GALT (NM_000155) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | GALT (NM_000155) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | GALT |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC202206 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCCGATCGCC

ATGTCGCGCAGTGGAAACCGATCCTCAGCAACGCCAGCAGGCGTCAGAGGCGGACGCCGAGCAGCAACCTCCGGGCAAACGACCATCAGCATATCCGCTACAACCCGCTGCAGGATGAGTGGGTGCTGGTGTGAGTCA
CCGCATGAAGCGGCCCTGGCAGGGTCAAGTGGAGCCCCAGCTTCTGAAGACAGTCCCCGCCATGACCCCTC
TCAACCCCTCTGTGTCTGGGGCCATCCGAGCCAACGGAGAGGTGAATCCCCAGTACGATAGCACCTTCC
TGTTTGACAACGACTTCCAGCTCTGCAGCCTGATGCCCCAGTCCAGGACCCAGTGATCATCCCCTTTT
CCAAGCAAAGTCTGCTCGAGGAGTCTGTAAGGTATGTGCTTCCACCCCTGGTTCGATGTAACGCTGCCA
CTCATGTGCGTCCCTGAGATCCGGGCTGTTGTTGATGCATGGGCCTCAGTACAGAGGAGCTGGGTGCC
AGTACCCTTGGGTGCAGATCTTTGAAAACAAAGGTGCCATGATGGGCTGTTCTAACCCCCACCCCACTG
CCAGGTATGGGCCAGCAGTTTCTGCCAGATATTGCCAGCGTGAGGAGCGATCTCAGCAGGCCTATAAG
AGTCAGCATGGAGAGCCCTGCTAATGGAGTACAGCCGCCAGGAGCTACTCAGGAAGGAACGTCTGGTCC
TAACCACTGAGCACTGGTTAGTACTGGTCCCCTTCTGGGCAACATGGCCCTACCAGACACTGCTGCTGCC
CCGTCGGCATGTGCGGCGGCTACCTGAGCTGACCCCTGCTGAGCGTGATGATCTAGCCTCCATCATGAAG
AAGCTCTTGACCAAGTATGACAACCTCTTTGAGACGTCCTTTCCCTACTCCATGGGCTGGCATGGGGCTC
CCACAGGATCAGAGGCTGGGGCCAACTGGGACATTGGCAGCTGCACGCTCATTACTACCCTCCGCTCCT
GGCTCTGCCACTGTCCGAAATTCATGTTGGCTACGAAATGCTTGCTCAGGCTCAGAGGGACCTCACC
CCTGAGCAGGCTGCAGAGAGACTAAGGGCACTTCTGAGGTTTATTACCCTGGGGCAGAAGGACAGGG
AGACAGCAACCATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202206 protein sequence
Red=Cloning site Green=Tags(s)

MSRSGTDPQQRQQAEEADAAAATFRANDHQHIRYNPLQDEWLVSAHRMKRPWQGQVEPQLLKTVPRHDP
 LNPLCPGAIRANGEVNPQYDSTFLFDNDFPALQPDAPSPGPSDHPLFQAKSARGVCKVMCFHPWSDVTLP
 LMSVPEIRAVVDAWASVTEELGAQYPWVQIFENKGAMMGCSNPHPHCQVWASSFLPDIAQREERSQQAYK
 SQHGPELLMEYSRQELLRKERLVL TSEHWLVL VPFWATWPYQTL LLLPRRHVRRLELTPAERDDLASIMK
 KLLTKYDNLFETSFYPSMGWHGAPTGSEAGANWDHWQLHAHYYP LLLRSATVRKFMVGYEMLAQQRDLT
 PEQAAERLRALPEVHYHLGQKDRETATIA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6306_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_000155

ORF Size: 1137 bp

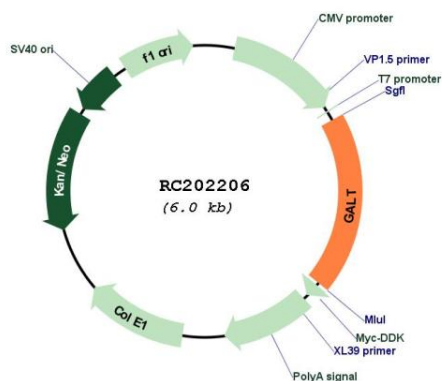
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

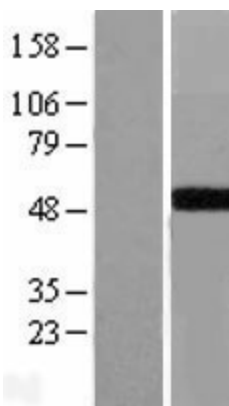
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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|-------------------------------|--|
| Reconstitution Method: | <ol style="list-style-type: none">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: | NM_000155.4 |
| RefSeq Size: | 1407 bp |
| RefSeq ORF: | 1140 bp |
| Locus ID: | 2592 |
| UniProt ID: | P07902 |
| Cytogenetics: | 9p13.3 |
| Domains: | GalP_UDP_transf, GalP_UDP_tr_C |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Metabolic pathways |
| MW: | 43.4 kDa |
| Gene Summary: | Galactose-1-phosphate uridyl transferase (GALT) catalyzes the second step of the Leloir pathway of galactose metabolism, namely the conversion of UDP-glucose + galactose-1-phosphate to glucose-1-phosphate + UDP-galactose. The absence of this enzyme results in classic galactosemia in humans and can be fatal in the newborn period if lactose is not removed from the diet. The pathophysiology of galactosemia has not been clearly defined. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012] |

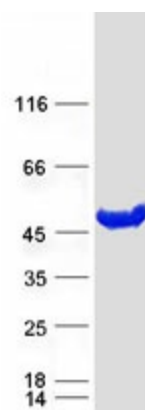
Product images:



Circular map for RC202206



Western blot validation of overexpression lysate (Cat# [LY424895]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202206 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GALT protein (Cat# [TP302206]). The protein was produced from HEK293T cells transfected with GALT cDNA clone (Cat# RC202206) using MegaTran 2.0 (Cat# [TT210002]).