

Product datasheet for **RG202206**

GALT (NM_000155) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GALT (NM_000155) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GALT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202206 representing NM_000155 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGCGCAGTGGAAACCGATCCTCAGCAACGCCAGCAGGCGTCAGAGGCGGACGCCGAGCAGCAACCT
TCCGGGCAAACGACCATCAGCATATCCGCTACAACCCGCTGCAGGATGAGTGGGTGCTGGTGTGAGTCA
CCGCATGAAGCGGCCCTGGCAGGGTCAAGTGGAGCCCCAGCTTCTGAAGACAGTCCCCGCCATGACCT
CTCAACCCTCTGTGCTCTGGGGCCATCCGAGCCAACGGAGAGGTGAATCCCCAGTACGATAGCACCTTCC
TGTTTGACAACGACTTCCAGCTCTGCAGCCTGATGCCCCAGTCCAGGACCCAGTGATCATCCCCTTTT
CCAAGCAAAGTCTGCTCGAGGAGTCTGTAAGGTGATGTGCTTCCACCCCTGGTCGGATGTAACGCTGCCA
CTCATGTGCGTCCCTGAGATCCGGGCTGTTGTTGATGCATGGGCCTCAGTCACAGAGGAGCTGGGTGCC
AGTACCCTTGGGTGCAGATCTTTGAAAACAAAGGTGCCATGATGGGCTGTTCTAACCCCCACCCCACTG
CCAGGTATGGGCCAGCAGTTTCTGCCAGATATTGCCAGCGTGAGGAGCGATCTCAGCAGGCCTATAAG
AGTCAGCATGGAGAGCCCTGCTAATGGAGTACAGCCGCCAGGAGCTACTCAGGAAGGAACGTCTGGTCC
TAACCAGTGAGCACTGGTACTGTTGCTCCCTTCTGGGCAACATGGCCCTACCAGACACTGCTGCTGCC
CCGTCGGCATGTGCGGCGGCTACCTGAGCTGACCCCTGCTGAGCGTGATGATCTAGCCTCCATCATGAAG
AAGCTCTTGACCAAGTATGACAACCTCTTTGAGACGTCCTTTCCCTACTCCATGGGCTGGCATGGGGCTC
CCACAGGATCAGAGGCTGGGGCCAACTGGGACATTGGCAGCTGCACGCTCATTACTACCCTCCGCTCCT
GGCTCTGCCACTGTCCGAAATTCATGTTGGCTACGAAATGCTTGCTCAGGCTCAGAGGGACCTCACC
CCTGAGCAGGCTGCAGAGAGACTAAGGGCACTTCTGAGGTTTATTACCCTGGGGCAGAAGGACAGGG
AGACAGCAACCATCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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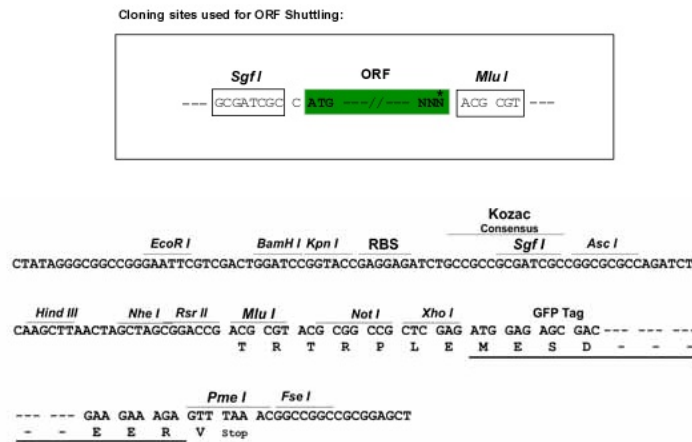
Protein Sequence: >RG202206 representing NM_000155
 Red=Cloning site Green=Tags(s)

MSRSGTDPQQRQQASEADAAAATFRANDHQHIRYNPLQDEWVLVSAHRMKRPWQGQVEPQLLKTVPRHDP
 LNPLCPGAIRANGEVNPQYDSTFLFDNDFPALQPDAPSPGSPDHPLFQAKSARGVCKVMCFHPWSDVTLPL
 LMSVPEIRAVVDAWASVTEELGAQYPWVQIFENKGAMMGCSNPHPHCQVWASSFLPDIAQREERSQQAYK
 SQHGPELLMEYSRQELLRKERLVL TSEHWLVL VPFWATWPYQTL LLLPRRHVRRLELTPAERDDLASIMK
 KLLTKYDNLFETSFYSGWGHGAPTGEAGANWDHWQLHAHYYP LLLRSATVRKFMVGYEMLAQAQRDLT
 PEQAAERLRALPEVHYHLGQKDRETATIA

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

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_000155.2](#), [NP_000146.2](#)

RefSeq Size: 1347 bp

RefSeq ORF: 1140 bp

Locus ID: 2592

UniProt ID: [P07902](#)

Cytogenetics: 9p13.3

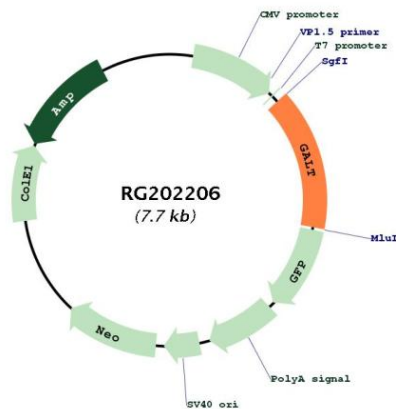
Domains: GalP_UDP_transf, GalP_UDP_tr_C

Protein Families: Druggable Genome

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Metabolic pathways

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 RG202206