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Product datasheet for RC205706

GAL3ST1 (NM_004861) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GAL3ST1 (NM_004861) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GAL3ST1
Synonyms:	CST
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC205706 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGCCACCGCAGAAGAAGCCCTGGGAGTCCATGGCTAAGGGGCTGGTGCTGGGCGCGCTCTTCACTA
GTTTCCTGCTGCTGATGTACTCCTATGCCGTGCCCCCGCTGCATGCCGGCCTGGCCTCCACGACCCCGGA
GGCCGCAGCGTCCTGCTCTCCACCTGCACTCGAGCCAGAGGCAGTGATCCGGGCCAACGGCTCGGCGGGG
GAGTGCCAGCCGCGGCGCAACATCGTGTTCTTGAAGACGCACAAGACGGCCAGCAGCACCCTGCTCAACA
TCCTGTTCCGCTTCGGCCAGAAGCACCGGCTCAAGTTCGCCTTCCCTAACGGCCGCAATGACTTCGACTA
CCCGACCTTCTTCGCCCGCAGCCTGGTGCAGGACTATCGGCCCGGGGCCTGCTTCAACATCATCTGCAAC
CACATGCGCTTCCACTACGACGAGGTGCGCGGCCTGGTGCCGACCAACGCCATCTTCATCACGGTGCTCC
GCGACCCCGCCCGCTTGTTCGAGTCCTCCTTCCACTACTTCGGGCCGGTGGTGCCCCTCACGTGGAAGCT
CTCGGCCGGCGACAAGCTGACCGAGTTCCTGCAAGACCCGGATCGCTACTACGACCCCAACGGCTTCAAT
GCCCACTACCTCCGAAACCTGCTCTTCTTCGACCTGGGCTATGACAACAGCCTGGACCCCAGCAGCCCGC
AGGTGCAGGAGCACATCCTGGAGGTGGAGCGTCGCTTCCACCTGGTGCTCCTTCAAGAGTACTTCGACGA
GTCGCTGGTGCTGCTGAAGGACCTGCTGTGCTGGGAGCTGGAGGACGTGCTCTACTTCAAGCTCAACGCC
CGCCGCGACTCGCCCGTGCCGCGGCTCTCGGGGGAGCTGTATGGGCGCGCCACCGCCTGGAACATGCTGG
ACTCCCACCTCTACCGCCACTTCAACGCCAGCTTCTGGCGCAAGGTGGAGGCCTTCGGGCGGGAGCGCAT
GGCCCGCGAGGTGGCCGCCCTGCGCCATGCCAACGAGCGCATGCGGACCATCTGCATCGACGGGGGCCAC
GCCGTGGACGCCGCCGCCATCCAGGACGAGGCCATGCAGCCCTGGCAGCCGCTGGGCACCAAGTCCATCC
TGGGCTACAACCTCAAGAAGAGCATCGGGCAGCGGCACGCGCAGCTCTGCCGGCGCATGCTCACGCCCGA
GATCCAGTACCTGATGGACCTCGGCGCCAACCTGTGGGTCACCAAGCTCTGGAAGTTCATTCGCGATTTC
CTGCGGTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205706 protein sequence
Red=Cloning site Green=Tags(s)

MLPPQKKPWESMAKGLVLGALFTSFLLLMYSYAVPPLHAGLASTTPEAAASCSPPALEPEAVIRANGSAG
ECQPRRNIVFLKTHKTASSTLLNILFRFGQKHRLKFAFPNGRNDFDYPTFFARSLVQDYRPGACFNIICN
HMRFHYDEVRGLVPTNAIFITVLRDPARLFESSFHYFGPVVPLTWKLSAGDKLTEFLQDPDRYYDPNGFN
AHYLRNLLFFDLGYDNSLDPSSPQVQEHILEVERRFHLVLLQEYFDESLVLLKDLLCWELEDVLYFKLNA
RRDSPVPRLSGELYGRATAWNMLDSHLYRHFNASFWRKVEAFGRERMAREVAALRHANERMRTICIDGGH
AVDAAAIQDEAMQPWQPLGTKSILGYNLKKSIGQRHAQLCRRMLTPEIQYLMDLGANLWVTKLWKFIRDF
LRW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6420_g02.zip

Restriction Sites: SgfI-MluI

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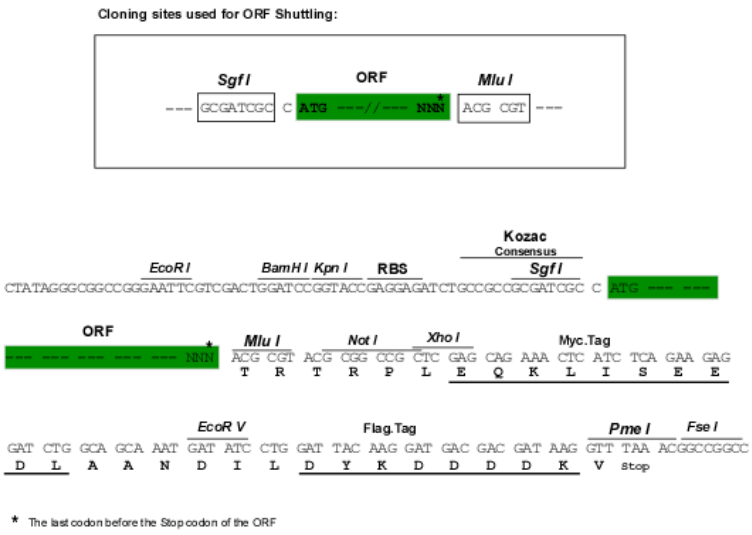
Cloning Scheme:



ACCN: NM_004861

ORF Size: 1269 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: NM_004861.3

RefSeq Size: 1791 bp

RefSeq ORF: 1272 bp

Locus ID: 9514

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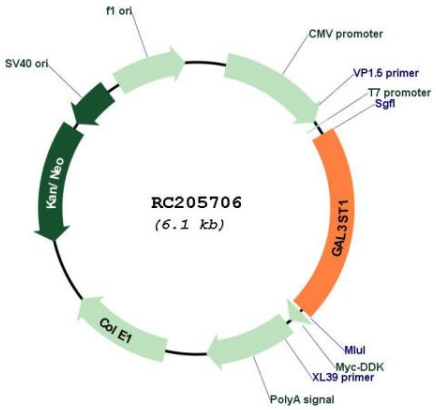
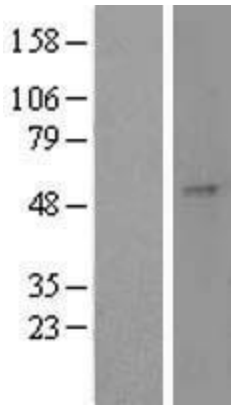
UniProt ID:	Q99999
Cytogenetics:	22q12.2
Protein Families:	Transmembrane
Protein Pathways:	Metabolic pathways, Sphingolipid metabolism
MW:	48.8 kDa
Gene Summary:	Sulfonation, an important step in the metabolism of many drugs, xenobiotics, hormones, and neurotransmitters, is catalyzed by sulfotransferases. This gene encodes galactosylceramide sulfotransferase, which catalyzes the sulfation of membrane glycolipids including the final step in the synthesis of sulfatide, a major lipid component of the myelin sheath. This gene exhibits elevated expression in ovarian epithelial carcinoma and the encoded enzyme exhibits elevated activity in renal cell carcinoma. Mutations in this gene may be associated with reduced insulin resistance. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RC205706



Western blot validation of overexpression lysate (Cat# [LY417697]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205706 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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