

Product datasheet for **RG208708**

GALNS (NM_000512) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GALNS (NM_000512) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GALNS
Synonyms:	GalN6S; GALNAC6S; GAS; MPS4A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG208708 representing NM_000512
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCGGTTGTGCGGCGCAGAGTGGTGGCAGCTGTTGCTGGTGTCTCAGCGCCGCGGGATGGGG
 CCTCGGGCGCCCGCAGCCCCAACATCCTGCTCCTGCTCATGGACGACATGGGATGGGGTGACCTCGG
 GGTGTATGGAGAGCCCTCCAGAGAGACCCGAATTTGGACCGGATGGCTGCAGAAGGGCTGCTTTCCCA
 AACTTCTATTCTGCCAACCTCTGTGCTCGCCATCGAGGGCGGCACTGCTCACAGGACGGCTACCCATCC
 GCAATGGCTTCTACACCACCAACGCCATGCCAGAAACGCCTACACACCGCAGGAGATTGTGGGCGGCAT
 CCCAGACTCGGAGCAGCTCCTGCCGAGCTTCTGAAGAAGGCCGGCTACGTCAGCAAGATTGTGGCAAG
 TGGCATCTGGGTACAGGCCAGTCCACCCCTGAAGCACGGATTTGATGAGTGGTTGGATCCCCCA
 ACTGCCACTTTGGACCTATGACAACAAGGCCAGGCCAACATCCCTGTGTACAGGGACTGGGAGATGGT
 TGGCAGATATTATGAAGAATTTCTATTAATCTGAAGACGGGGGAAGCCAACCTCACCCAGATCTACCTG
 CAGGAAGCCCTGGACTTCATTAAGAGACAGGCACGGCACCCCTTTTTCTCTACTGGCTGTGACG
 CCACGCACGCACCCGTCTATGCCTCCAAACCTTCTTGGGCACCACTGTCAGCGAGGGCGGTATGGAGACGC
 CGTCCGGGAGATTGATGACAGCATTGGGAAGATACTGGAGCTCCTCCAAGACCTGCACGTGCGGACAAC
 ACCTTCGTCTTCTCACGTGCGACAACGGCGCTGCCCTCATTTCCGCCCCGAACAAGGTGGCAGCAACG
 GCCCTTTCTGTGTGGGAAGCAGACCAGTTTGAAGGAGGGATGAGGGAGCCTGCCCTCGCATGGTGGCC
 AGGGCACGTCACTGCAGGCCAGGTGAGCCACAGCTGGGCAGCATCATGGACCTTTCACCACAGCCTG
 GCCCTTTCGGGCTGACGCCGCCAGCGACAGGGCCATTGATGGCCTCAACCTCTCCACCCCTCTGTC
 AGGGCCGGCTGATGGACAGGCCATCTTCTATTACCGTGGCGACACGCTGATGGCGGCCACCCCTCGGGC
 GCACAAGGCTCACTTCTGGACCTGGACCAACTCCTGGGAGAATTCAGACAGGGCATTGATTTCTGCCCT
 GGGCAGAACGTTTCAGGGGTCACTCAACTCAATCTGGAAGACCACGAAGCTGCCCTGATCTTCCACC
 TGGGACGGGACCCAGGGGAGAGTTCCCCCTCAGCTTTGCCAGCGCCGAGTACCAGGAGGCCCTCAGCAG
 GATCACCTCGGTCTCCAGCAGCACCAGGAGCCCTTGGTCCCGCGCAGCCCCAGCTCAACGTGTGCAAC
 TGGGCGGTGATGAAGTGGGCACCTCCGGGCTGTGAAAAGTTAGGGAAGTGTCTGACACCTCCAGAATCCA
 TTCCCAAGAAGTGCCTCTGGTCCAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG208708 representing NM_000512
 Red=Cloning site Green=Tags(s)

MAAVVAATRWQLLLLVLSAAGMGASGAPQPPNILLLLMDDMGWDLGVYGEPSRETPNLDRAAAEGLLFP
 NFYSANPLCSPSRAALLTGRLPIRNGFYTTNAHARNAYTPQEIIVGGIPDSEQLLPELLKKAGYVSKIVGK
 WHLGHRPQFHPLKHGFDEFW GSPNCHFGPYDNKARPNIIPYRDWEMVGRYYEFPINLKTGEANLTQIYL
 QEALDFIKRQARHHPFFLYWAVDATHAPVYASKPFLGTSQRGRYGDVREIDDSIGKILELLQDLHVADN
 TFVFFTS DNGAALISAPEQGGSNPFLCGKQTTFEGGMREPALAWWPGHV TAGQVSHQLGSIMDLFTTSL
 ALAGLTPPSDRAIDGLNLLPTLLQGRLMDRPIFYRGTDLMAATLGQHKAHFWTWTNSWENFRQGDIFCP
 GQNVSGVTTHNLEDHTKLPLIFHLGRDPGERFPLSFASAEYQEALSRITSVVQQHQEALVPAQPQLNVCN
 WAVMNWAPPGCEKLGKCLTPPEIPKKCLWSH

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_000512

ORF Size: 1566 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_000512.5](#)

RefSeq Size: 2390 bp

RefSeq ORF: 1569 bp

Locus ID: 2588

UniProt ID: [P34059](#)

Cytogenetics: 16q24.3

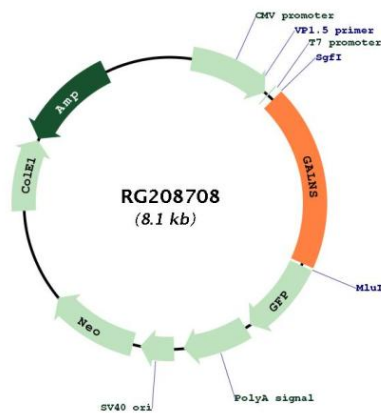
Domains: Sulfatase

Protein Families: Druggable Genome

Protein Pathways: Glycosaminoglycan degradation, Lysosome, Metabolic pathways

Gene Summary: This gene encodes N-acetylgalactosamine-6-sulfatase which is a lysosomal exohydrolase required for the degradation of the glycosaminoglycans, keratan sulfate, and chondroitin 6-sulfate. Sequence alterations including point, missense and nonsense mutations, as well as those that affect splicing, result in a deficiency of this enzyme. Deficiencies of this enzyme lead to Morquio A syndrome, a lysosomal storage disorder. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG208708