

Product datasheet for **RC208708**

GALNS (NM_000512) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GALNS (NM_000512) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GALNS
Synonyms:	GalN6S; GALNAC6S; GAS; MPS4A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC208708 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCGGTTGTGCGGCGACGAGGTGGTGGCAGCTGTTGCTGGTGCTCAGCGCCGCGGGATGGGG
 CCTCGGGCGCCCGCAGCCCCAACATCCTGCTCCTGCTCATGGACGACATGGGATGGGGTGACCTCGG
 GGTGTATGGAGAGCCCTCCAGAGAGACCCGAATTTGGACCGGATGGCTGCAGAAGGGCTGCTTTCCCA
 AACTTCTATTCTGCCAACCCCTGTGCTCGCCATCGAGGGCGGCACTGCTCACAGGACGGCTACCCATCC
 GCAATGGCTTCTACACCACCAACGCCATGCCAGAAACGCCTACACACCGCAGGAGATTGTGGGCGGCAT
 CCCAGACTCGGAGCAGCTCCTGCCGAGCTTCTGAAGAAGGCCGGCTACGTCAGCAAGATTGTCGGCAAG
 TGGCATCTGGGTACAGGCCAGTTCACCCCTGAAGCACGGATTTGATGAGTGGTTGGATCCCCCA
 ACTGCCACTTTGGACCTATGACAACAAGGCCAGGCCAACATCCCTGTGTACAGGGACTGGGAGATGGT
 TGGCAGATATTATGAAGAATTTCTATTAATCTGAAGACGGGGGAAGCCAACCTCACCCAGATCTACCTG
 CAGGAAGCCCTGGACTTCATTAAGAGACAGGCACGGCACCCCTTTTTCTCTACTGGCTGTGACG
 CCACGCACGCACCCGTCTATGCCTCCAAACCTTCTTGGGCACCAAGTCAGCGAGGGCGGTATGGAGACGC
 CGTCCGGGAGATTGATGACAGCATTGGGAAGATACTGGAGCTCCTCCAAGACCTGCACGTGCGGACAAC
 ACCTTCGTCTTCTCACGTGCGACAACGGCGCTGCCCTCATTTCCGCCCCGAACAAGGTGGCAGCAACG
 GCCCTTTCTGTGTGGGAAGCAGACCAGTTTGAAGGAGGGATGAGGGAGCCTGCCCTCGCATGGTGGCC
 AGGGCACGTCACTGCAGGCCAGGTGAGCCACCAGCTGGGCAGCATCATGGACCTTTCACCACGACCTG
 GCCCTTTCGGGCTGACGCCGCCAGCAGGGCCATTGATGGCCTCAACCTCTCCACCCCTCGGCA
 AGGGCCGGCTGATGGACAGGCCATCTTCTATTACCGTGGCGACACGCTGATGGCGGCCACCCCTCGGCA
 GCACAAGGCTCACTTCTGGACCTGGACCAACTCCTGGGAGAACTTCAGACAGGGCATTGATTTCTGCCCT
 GGGCAGAACGTTTCAGGGGTCAACACTACAATCTGGAAGACCACGAAGCTGCCCTGATCTTCCACC
 TGGGACGGGACCCAGGGGAGAGTTCCCCCTCAGCTTTGCCAGCGCCGAGTACCAGGAGGCCCTCAGCAG
 GATCACCTCGGTCTCCAGCAGCACCAGGAGCCCTTGGTCCCGCGCAGCCCGAGCTCAACGTGTGCAAC
 TGGGCGGTGATGAAGTGGGCACCTCCGGGCTGTGAAAAGTTAGGGAAAGTGTGACACCTCCAGAATCCA
 TTCCAAGAAGTGCCTCTGGTCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208708 protein sequence
 Red=Cloning site Green=Tags(s)

MAAVVAATRWWQLLLVLSAAGMGASGAPQPPNILLLLMDDMGWDLGVYGEPSRETPNLDRAAEGLLFP
 NFYSANPLCSPSRAALLTGRLPINRNGFYTTNAHARNAYTPQEIIVGGIPDSEQLLPELLKKAGYVSKIVGK
 WHLGHRPQFHPLKHGFDEWFSPNCHFGPYDNKARNIPVYRDWEMVGRYYEEFPINLKTGEANLTQIYL
 QEALDFIKRQARHHPFFLYWAVDATHAPVYASKPFLGTSQRGRYGDVREIDDSIGKILELLQDLHVADN
 TFFVFTSDNGAALISAPEQGSNGPFLCGKQTTFEGGMREPALAWWPGHVTAGQVSHQLGSIMDLFTTSL
 ALAGLTPPSDRAIDGLNLLPTLLQGRMDRPIFYRGTDLMAATLGQHKAHFWTWTNSWENFRQGIDFCP
 GQNVSGVTTNHLEDHTKLPLIFHLGRDPGERFPLSFAAEYQEALSRITSVVQQHQEALVPAQPQLNVCN
 WAVMNWAPPGCEKLGKCLTPPESIPKKCLWSH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6224_g07.zip

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: 2380 bp

RefSeq ORF: 1569 bp

Locus ID: 2588

UniProt ID: [P34059](#)

Cytogenetics: 16q24.3

Domains: Sulfatase

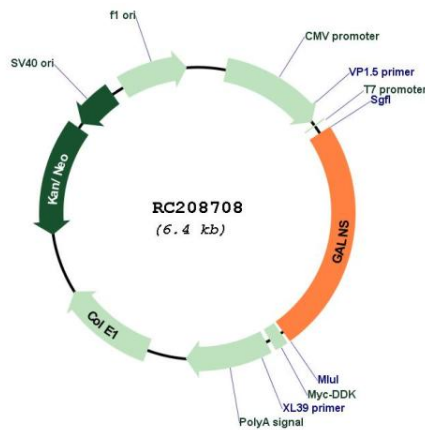
Protein Families: Druggable Genome

Protein Pathways: Glycosaminoglycan degradation, Lysosome, Metabolic pathways

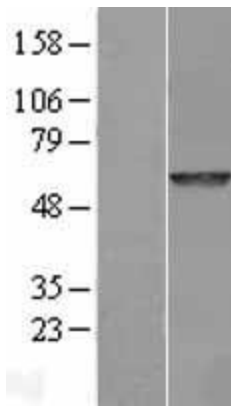
MW: 58 kDa

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]

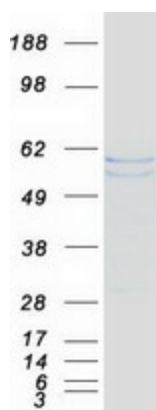
Product images:



Circular map for RC208708



Western blot validation of overexpression lysate (Cat# [LY424670]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208708 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GALNS protein (Cat# [TP308708]). The protein was produced from HEK293T cells transfected with GALNS cDNA clone (Cat# RC208708) using MegaTran 2.0 (Cat# [TT210002]).