

Product datasheet for **RC200475**

GALK2 (NM_002044) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GALK2 (NM_002044) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GALK2
Synonyms:	GK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC200475 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTACAGAGACCCCTGCTACCGCTCGGGTCCAGGTGGCAGAACATCCTAGGTTACTGAAGCTAAAGG
 AGATGTTTAACTCCAAGTTTGGATCTATCCCAAGTTTTATGTTTCGAGCACCAGGAAGAGTCAACATAAT
 AGGAGAGCATATAGATTATTGTGGATATTCTGTTCTTCCTATGGCTGTAGAACAAGATGTGCTAATAGCT
 GTAGAACCTGTGAAAACGTACGCTCTCCAAGTGGCCAATACAAATCCCTTGATCCGGACTTCAGTACTA
 GTGCTAATAACATCCAGATTGATAAAACCAAGCCTTTGTGGCACAACATTTCTTATGTGGACTTAAAGG
 AATTTCAGGAACACTTTGGTCTTAGTAACCTGACTGGAATGAACCTGCTGGTAGATGGAAATATCCCACCA
 AGTTCTGGCCTCTCCAGCTCCAGTGCTTTGGTCTGTTGTGCTGGCTTGGTACGCTCACAGTCTGGGAA
 GGAATCTATCCAAGGTGGAACCTGCAGAAATCTGTCCAAGAGTGAGCGTTACATTGGCACTGAAGGAGG
 AGGCATGGACCAGTCTATATCATTCTTGCAAGAAGAAGGAAGTCCAAGTTGATAGAATTTAGTCTCTG
 AGGGCAACCGATGTAAGTCCCAAGTGGAGCAGTGTGTTGTGATTGCCAAGATTGTGTGGAGATGAATA
 AGGCAGCAACTCCCATTCAATATCAGGGTGTGGAGTGTGGCTGGCTGCGAAGCTCCTGGCTAATA
 CAAAAGCTTGCAATGGGACAAAGTACTGAGGCTGGAGGAGGTGCAGGCTAAACTAGGGATTAGTCTAGAA
 GAAATGCTGTTGGTACAGAAAGTGCCTTCATCCTGAACCTATAACCTGAGGAGATCTGCAGGTGTC
 TGGGAATTAGCCTGGAGGAACCTCCGAACCCAAATCCTGAGTCCAAACACTCAAGATGTGCTCATCTTCAA
 ACTCTATCAGCGGGCAAAGCATGTGTACAGCGAGGCTGCGCGAGTGTCCAGTTTAAAGAGATATGTGAA
 GAAGCACCTGAAAACATGGTCCAGCTGCTGGGAGAGTTGATGAACCAGAGCCACATGAGCTGCCGGGACA
 TGTATGAGTGCAGCTGCCCGAGCTGGATCAGCTGGTGGACATCTGTCGGAAGTTGGGGCTCAAGGGTC
 ACGACTTACTGGAGCAGGATGGGAGGCTGTACAGTATCAATGGTACCTGCGGACAAGCTGCCAGCTTT
 CTAGCAAATGTGCACAAAGCTTATTACCAGAGGAGTGTGGAAGCTTAGCACCGGAGAAGCAAAGTTTGT
 TTGCTACCAAACCTGGAGGTGGGCTTTGGTTTTGCTTGAAGCC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200475 protein sequence
 Red=Cloning site Green=Tags(s)

MATESPATRRVQVAEHPRLKLEKEMFNSKFGSIPKFYVRAPGRVNIIGEHIIDYCGYSVLPMAVEQDVLIA
 VEPVKTYALQLANTNPLYPDFSTANNIQQIDTKPLWHNYFLCGLKGIQEHFGLSNLTGMNCLVDGNIPP
 SSSLSSSALVCCAGLVTLTVLGRNLSKVELAEICAKSERYIGTEGGMDQSI SFLAEEGTAKLIEFSPL
 RATDVKLPSGAVFVIANSCEMKNKAATSHFNIRVMECRLAAKLLAKYKSLQWDKVLRLIEVQAKLGISLE
 EMLLVTE DALHPEPYNPEEICRCLGISLEELRTQILSPNTQDVLIFKLYQRAKHVYSEAAARVLQFKKICE
 EAPENMVQLLGELMNQSHMSCRDMYECSPQLDQLVDICRKFQAQGSRLTGAGWGGCTVSMVPADKLPSP
 LANVHKAYYQRSDGSLAPEKQSLFATKPGGGALVLEA

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6186_e08.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_002044

ORF Size: 1374 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_002044.1](#)

RefSeq Size: 3330 bp

RefSeq ORF: 1377 bp

Locus ID: 2585

UniProt ID: [Q01415](#)

Cytogenetics: 15q21.1-q21.2

Domains: GHMP_kinases

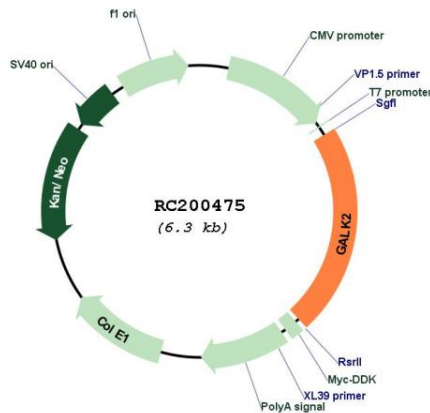
Protein Families: Druggable Genome

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

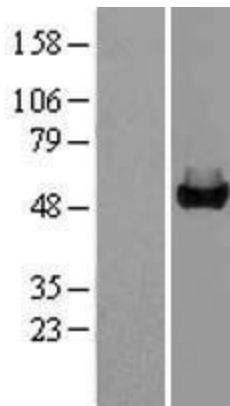
MW: 50.4 kDa

Gene Summary: This gene encodes a highly efficient N-acetylgalactosamine (GalNAc) kinase, which has galactokinase activity when galactose is present at high concentrations. The encoded protein is a member of the GHMP kinase family. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2017]

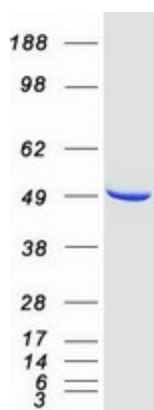
Product images:



Circular map for RC200475



Western blot validation of overexpression lysate (Cat# [LY400749]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200475 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GALK2 protein (Cat# [TP300475]). The protein was produced from HEK293T cells transfected with GALK2 cDNA clone (Cat# RC200475) using MegaTran 2.0 (Cat# [TT210002]).