

Product datasheet for **RC216527**

GALK2 (NM_001001556) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GALK2 (NM_001001556) 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)



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ORF Nucleotide Sequence:

>RC216527 representing NM_001001556
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCCGTCTATATGACAGGTTACTGAAGCTAAAGGAGATGTTAACTCCAAGTTGGATCTATCCCA
 AGTTTTATGTTTCGAGCACCAGGAAGAGTCAACATAATAGGAGAGCATATAGATTATTGTGGATATTCTGT
 TCTTCCTATGGCTGTAGAACAAAGATGTGCTAATAGCTGTAGAACCCTGTGAAAACGTACGCTCTCCA
 ACTGCCAATACAAATCCCTTGTATCCGGACTTCAGTACTAGTCTAATAACATCCAGATTGATAAAACCAAGC
 CTTTGTGGCACAACACTATTTCTTATGTGGACTTAAAGGAATTCAGGAACACTTTGGTCTTAGTAACCTGAC
 TGGAAATGAACTGCCTGGTAGATGAAAATATCCACCAAGTTCTGGCCTCTCCAGCTCCAGTGCTTTGGTC
 TGTTGTGTGGCTTGGTACGCTCACAGTGTGGGAAGGAATCTATCCAAGGTGGAACCTGCAGAAATCT
 TGCCAAGAGTGAGCGTTACATTGGCACTGAAGGAGGAGGCATGGACCAGTCTATATCATTTCTTGCGA
 AGAAGGAACTGCCAAGTTGATAGATTTAGTCCTCTGAGGGCAACCGATGTA
 AAACTCCCAAGTGGAGCATGTTTTGTGATTGCCAACAGTTGTGTGGAGATGAATAAGGCAGCAACTCCCA
 TTTCAATATCAGGGTGA
 TGGAGTGTCCGGCTGGCTGCGAAGCTCCTGGCTAAATACAAAAGCTTGAATGGGACAAAAGTACTGAGGCT
 GGAGGAGGTGCAGGCTAAACTAGGGATTAGTCTAGAAGAAATGCTGTTGGTACAGAAAGTGCCTTCAT
 CCTGAACCCTATAACCCTGAGGAGATCTGCAGGTGTCTGGGAATTAGCCTGGAGGAACTCCGAACCCAAA
 TCCTGAGTCCAAACACTCAAGATGTGCTCATCTCAAACCTATCAGCGGGCAAAGCATGTGTACAGCGA
 GGCTGCGCGAGTGCTCCAGTTTAAAGAAGATATGTGAAGAAGCACCTGAAAACATGGTCCAGCTGTGGGA
 GAGTTGATGAACCAGGCCACATGAGCTGCCGGGACATGTATGAGTGCAGCTGCCCGAGCTGGATCAGC
 TGGTGGACATCTGTCCGAAGTTTGGGGCTCAAGGGTACGACTTACTGGAGCAGGATGGGAGGCTGTAC
 AGTATCAATGGTACCTGCGGACAAGCTGCCAGCTTTCTAGCAAATGTGCACAAAGCTTATTACCAGAGG
 AGTGATGGAAGCTTAGCACCGGAGAAGCAAAGTTTGTGTTGCTACCAAACCTGGAGGTGGGCTTTGGTTT
 TGCTTGAGGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216527 representing NM_001001556
 Red=Cloning site Green=Tags(s)

MPVLYDRLLKLEMFNSKFGSIPKFYVRAPGRVNIIGEHIIDYCGYSVLPMAVEQDVLIAVEPVKTYALQL
 ANTNPYPDFSTANNIQIDKTKPLWHNYFLCGLKGIQEHFGLSNLTGMNCLVDGNIPSSGLSSSSALV
 CCAGLVTLTVLGRNLSKVELAEICAKSERYIGTEGGMDQSI SFLAEEGTAKLIEF SPLRATDVKLPSGA
 VFVIANSCEVMNKAATSHFNIRVMECRLAAKLLAKYKSLQWDKVLRL EEVQAKLGISLEEMLLVTE DALH
 PEPYNPEEICRCLGISLEELRTQILSPNTQDVLIFKLYQRAKHVYSEAARVLQFKKICEEAPENMVQLLG
 ELMNQSHMSCRDMYECSCPELDQLVDICRKFGAQSRLTGAGWGGCTVSMVPADKLP SFLANVHKAYYQR
 SDGSLAPEKQSLFATKPGGGALVLEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6709_a10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001001556

ORF Size: 1341 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_001001556.3](#)

RefSeq Size: 3208 bp

RefSeq ORF: 1344 bp

Locus ID: 2585

UniProt ID: [Q01415](#)

Cytogenetics: 15q21.1-q21.2

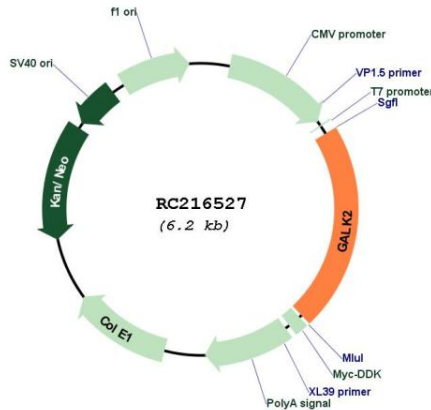
Protein Families: Druggable Genome

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

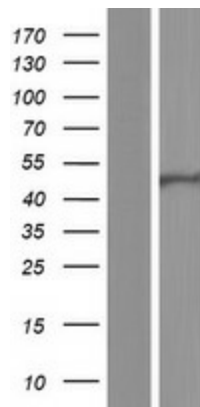
MW: 49.1 kDa

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]

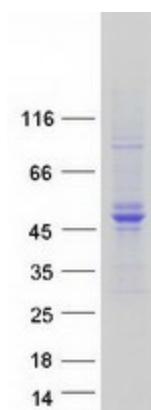
Product images:



Circular map for RC216527



Western blot validation of overexpression lysate (Cat# [LY424379]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216527 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GALK2 protein (Cat# [TP316527]). The protein was produced from HEK293T cells transfected with GALK2 cDNA clone (Cat# RC216527) using MegaTran 2.0 (Cat# [TT210002]).