

Product datasheet for **RC212021**

XYLB (NM_005108) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XYLB (NM_005108) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XYLB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212021 representing NM_005108
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGAGCACGCCCTCGCCGCTGCTGCCTGGGCTGGGACTTCAGCACGCAGCAGGTAAGGTTGTTG
 CTGTTGATGCAGAGTTGAATGTCTTCTATGAGGAAAGTGTGCATTTTGACAGAGATCTCCAGAATTTGG
 GACTCAGGGCGGTGTTTCATGTGCACAAGGATGGGCTGACGGTCACTTCTCCAGTACTAATGTGGGTCAG
 GCACTGGATATCATCTTGGAGAAGATGAAGGCTTCGGGCTTCGACTTCTCTCAAGTCTAGCCTGTCCG
 GGGCGGGCCAGCAACACGGAAGTATATACTGGAAGGCTGGAGCCCAGCAGGCACTGACAAGCTTATCACC
 AGACCTCCGGCTACACCAGCAGCTGCAGGACTGTTTCTCCATCAGCGACTGCCCGGTGTGGATGGACTCC
 AGCACCACAGCCCAGTCCCGCCAGCTGGAGGCTGCTGTGGGTGGTCTCAGGCTCTCAGTGCCTCAGG
 GGTCCCGTGCCTATGAGCGTTTTACAGGGAACCAATTGCAAAAATTTACCAGCAGAACCCCGAGGCTA
 CTCACATACGGAGAGAATTTCTTTGGTCAGTAGCTTTGCTGCTTCCCTGTTCCCTGGCTTCTACTCCCT
 ATTGACTACAGTATGGTTCTGGAATGAATTTGTTGCAGATACAGGATAAAGTCTGGTCCCAGGCTTGCC
 TTGGTGCCTGTGCACCTCATTTAGAGGAGAAGCTTAGCCACCAGTACCATCATGCTCAGTTGTGGGAGC
 CATTTCTTCTACTACGTCCAGCGCTACGGATTTCTCCAGGATGCAAAGTGGTGGCCTTACTGGGGAC
 AACCCAGCGTCGCTGGCAGGCATGAGACTGGAGGAAGGTGACATTGCGGTGAGCTGGGCACCAAGTACA
 CCCTGTTTCTCTGGCTCCAAGAGCCCATGCCTGCCCTGGAAGGCCACATCTTCTGCAACCCGGTTGACTC
 CCAGCACTACATGGCACTCCTGTGCTTTAAAAATGGCTCCCTCATGAGAGAGAAGATCCGCAACGAGTCT
 GTATCCCGTTCCTGGAGCGATTTCTCTAAGGCACTGCAGTCCACAGAGATGGGCAACGGTGGAAACCTGG
 GTTTTTATTTGATGTAATGGAGATCACCCCTGAAATTTGGACGTCATAGGTTTAAACACAGAAAACCA
 CAAGGTTGCAGCATTCCCTGGGGATGTGGAGGTTGAGCACTAATTGAAGGACAATTCATGGCCAAGAGG
 ATTCACGCAGAAGGCTGGGCTATCGAGTCATGTCCAAGACAAAGATTTGGCCACAGGAGGAGCATCTC
 ACAATAGAGAAATCTTACAGGTGCTTGCAGATGTGTTGATGCCCGGTGTATGTTATAGACTGCCAA
 CTCGGCTGTGTGGTCTGCATACCGAGCTTTTCATGGTCTTGCAGGTGGAACAGATGTGCCCTTTTCA
 GAGGTTGTGAAGTTAGCTCCAAATCCCAGACTAGCTGCTACCCCAAGCCGGGAGCTTCTCAGGTCTACG
 AGGCCCTTCTCCCCAGTATGCCAACTCGAGCAGAGAATCTTGTCTCAGACCCGGGGCCCTCCGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212021 representing NM_005108
 Red=Cloning site Green=Tags(s)

MAEHAPRRCLGWDFSTQQVKVAVDAELNVFYEESVHFDRDLPEFGTQGGVHVHKDGLTVTSPVLMWVQ
 ALDIILEKMKASGFDFSQVLALSGAGQQHGSIIYWKAGAQQAL TSLSPDLRLHQQLQDCFSISDCPVWMS
 STTAQCRQLEAAVGAQAL SCLTGS RAYERFTGNQIAKIYQNP EAYSHTERISLVSSFAASLFLGSYSP
 IDYSDGSGMNLQIQDKVWSQA CLGACAP HLEEKLSPPVPSCSVVGAISSYVQRYGFP PGCKVVAFTGD
 NPASLAGMRLEEGDIAVSLGSDTLFLWLQEPMPALEGHIFCNPVDSQH YMALLCFKNGSLMREKIRNES
 VSRWSDFSKALQSTEMGNGNLGFYFDVMEITPEIIGRHRFNTE NHKVAAPGDVEVRALIEGQFMAKR
 IHAEGLGYRVMSKTKILATGGASHNREILQVLADVFDAPVYVIDTANSACVGSAYRAFHGLAGGTDVPFS
 EVVKLAPNRLAATPSPGASQVYEALLPQYAKLEQRILSQTRGPPE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

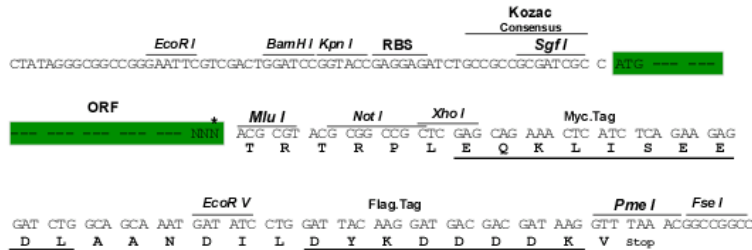
https://cdn.origene.com/chromatograms/mk8026_d09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_005108

ORF Size: 1608 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_005108.3](#), [NP_005099.2](#)
RefSeq Size: 3694 bp

RefSeq ORF: 1611 bp

Locus ID: 9942

UniProt ID: [O75191](#)

Cytogenetics: 3p22.2

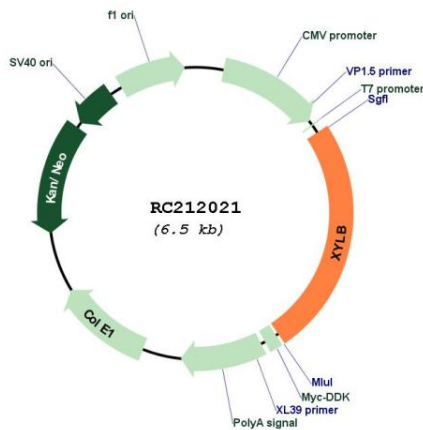
Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Pentose and glucuronate interconversions

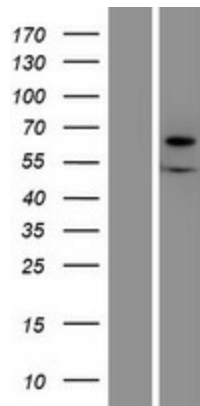
MW: 58.2 kDa

Gene Summary: The protein encoded by this gene shares 22% sequence identity with Hemophilus influenzae xylulokinase, and even higher identity to other gene products in C.elegans (45%) and yeast (31-35%), which are thought to belong to a family of enzymes that include fucokinase, gluconokinase, glycerokinase and xylulokinase. These proteins play important roles in energy metabolism. [provided by RefSeq, Aug 2009]

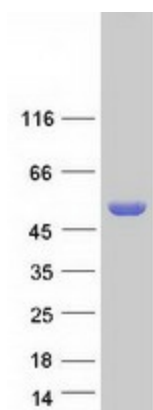
Product images:



Circular map for RC212021



Western blot validation of overexpression lysate (Cat# [LY417522]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212021 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified XYLB protein (Cat# [TP312021]). The protein was produced from HEK293T cells transfected with XYLB cDNA clone (Cat# RC212021) using MegaTran 2.0 (Cat# [TT210002]).