

Product datasheet for **RC202991**

HYI (NM_031207) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HYI (NM_031207) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HYI
Synonyms:	HT036
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202991 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCTGGGGCCGTCCCCGGGAGACAGGCGGCCTCCGAGAGGGACTGGAGCAGGCCGTGCGGTATG
CCAAAGCCCTGGGCTGTCCAGGATCCACCTGATGGCTGGCCGAGTACCCAGGGAGCTGATCGAATAGC
AGTCAAGGCTGAGATGGAGGCCGTTTTTCTGGAGAACCAGGCATGCAGCTGGGTTTTGGCTCAGGAG
GACCTCGTGGGACTGCTGGAGCCATCAACACCCGCATCACTGACCCCACTTCTGGACACGCCCC
AGCAGGCGGCAGCCATCTTACAGAAGGTAGGAAGACCCAACTCCAATTACAAATGGACATATCCACTG
GCAGATCATGGATGGGAACCTGACAGGAAACATCCGGGAGTTCCTGCCATTGTTGGGCATGTGCAGGTG
GCACAGTCCCAGGCCGAGGGGAGCCAGCAGCCCGGAGAGCTGAATTTCCCCTATCTGTTTCAACTGC
TGGAAAATGAAGGCTACAAGGCTTCGTGGGCTGTGAGTATCAGCCTCGAGGAGACACAGTAGAGGGCTT
GAGTTGGCTACGTTTCACTGGGATAGGCGGCCACCCAGAGGCTGGCCAGTGGGGCCCGCACACCACC
CACGTGCCTCCAGACAGCGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC202991 protein sequence
Red=Cloning site Green=Tags(s)

MGLGAVPGRQAAFREGLEQAVRYAKALGCPRIHLMAGRVPQGADRIAVKAEMEAVFLENLRHAAGVLAQE
 DLVGLLEPINTRITDPQYFLDTPQQAAAAILQKVGRPNLQLQMDIFHWQIMDGNLTGNIREFLPIVGHVQV
 AQVPGRGEPSSPGELNFPYLFQLLENEGYKGFVGCYQPRGDTVEGLSWLRSYWDRRATQRLASEGPHTT
 HVPPDSE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6557_d08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031207

ORF Size: 1365 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 Size: 1251 bp

RefSeq ORF: 744 bp

Locus ID: 81888

UniProt ID: [Q5T013](#)

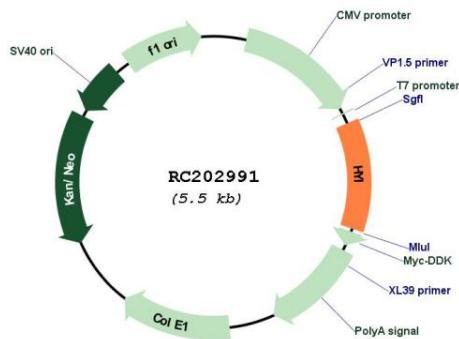
Cytogenetics: 1p34.2

Protein Pathways: Glyoxylate and dicarboxylate metabolism, Metabolic pathways

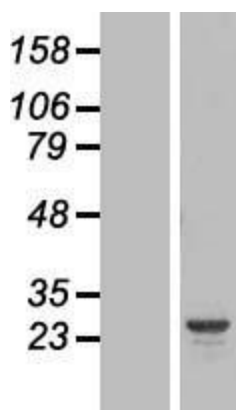
MW: 24.1 kDa

Gene Summary: This gene encodes a putative hydroxypyruvate isomerase, which likely catalyzes the conversion of hydroxypyruvate to 2-hydroxy-3-oxopropanoate, and may be involved in carbohydrate transport and metabolism. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011]

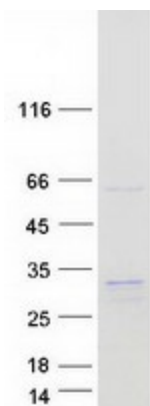
Product images:



Circular map for RC202991



Western blot validation of overexpression lysate (Cat# [LY410587]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202991 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HYI protein (Cat# [TP302991]). The protein was produced from HEK293T cells transfected with HYI cDNA clone (Cat# RC202991) using MegaTran 2.0 (Cat# [TT210002]).