

Product datasheet for RC202544

HEY2 (NM_012259) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HEY2 (NM_012259) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HEY2
Synonyms:	bHLHb32; CHF1; GRIDLOCK; GRL; HERP1; HESR2; HRT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202544 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCGCCCTGCGAGGAGACGACCTCCGAGAGCGACATGGACGAGACCATCGACGTGGGGAGCGAGA
ACAATTACTCGGGCAAAGTACTAGCTCTGTGATTAGATTGAATTCTCCAACAACAACATCTCAGATTAT
GGCAAGAAAGAAAAGGAGAGGGATTATAGAGAAAAGCGTCGGGATCGGATAAATAACAGTTTATCTGAG
TTGAGAAGACTTGTGCCAACTGCTTTTAAAAACAAGGATCTGCAAAGTTAGAAAAAGCTGAAATATTGC
AAATGACAGTGGATCATTGAAGATGCTTCAGGCAACAGGGGTAAAGGCTACTTTGACGCACACGCTCT
TGCCATGGACTTCATGAGCATAGGATCCGAGAGTGCCTAACAGAAGTTGCGCGGTACCTGAGCTCCGTG
GAAGGCCTGGACTCCTCGGATCCGCTGCGGGTGC GGCTTGTGCTCATCTCAGCACTTGCCGCCACCCAGC
GGGAGGCGGGCGGCATGACATCCTCATGGCCACCACCATCATCCGCTCCACCCGCATCACTGGGCCGC
CGCCTTCACCACCTGCCCGCAGCCCTGCTCCAGCCCAACGGCCTCCATGCCTCAGAGTCAACCCCTTGT
CGCCTCTCACAACCTCAGAAGTGCTCCTGCCACGGCTCTGCTCTCCTCACGGCCACGTTTGGCCATG
CGGATTCAGCCCTCCGAATGCCATCCACGGGACGCTCGCCCCCTGCGTGCCACCTCTCTCCACCTCTCT
CTTGTCCCTCTCTGCCACCGTCCACGCCGACCGCAGCAGCCACCGCGGCTGCACACAGCTTCCCTCTG
TCCTTCGCGGGGCATTCCCATGCTTCCCCAAACGCAGCAGCAGCAGTGGCCGGCCACAGCCATCA
GCCCGCCCTTGTGAGTATCAGCCAGTCCAGTCCCTCAGCAGACCAGCAGTGAACAAACAATAAACCTTA
CCGACCCTGGGGACAGAAGTTGGAGCTTTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202544 protein sequence
Red=Cloning site Green=Tags(s)

MKRPCEETTSESDMDDETIDVGSENNYSQGQSTSSVIRLNSPTTTSQIMARKKRRGIIIEKRRRDRINNSLSE
 LRRLVPTAFEKQGSAKLEKAEILQMTVDHLKMLQATGGKGYFDAHALAMDFMSIGFRECLTEVARYLSSV
 EGLDSSDPLRVRLVSHLSTCATQREAAAMTSSMAHHHPLHPHHWAAAFHHLPAALLQPNGLHASESTPC
 RLSTTSEVPPAHGSALLTATFAHADSALRMPSTGSAVPCVPPLSTLLSLSATVHAAAAATAAAHSFPL
 SFAGAFPMLPPNAAAATAIAPPLSVSATSSPQQTSSGTNNKPYRPPWGTEVGAF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6076_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012259

ORF Size: 1011 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_012259.3](#)

RefSeq Size: 2672 bp

RefSeq ORF: 1014 bp

Locus ID: 23493

UniProt ID: [Q9UBP5](#)

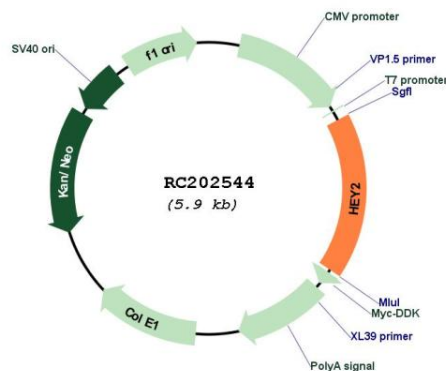
Cytogenetics: 6q22.31

Protein Families: Druggable Genome, Transcription Factors

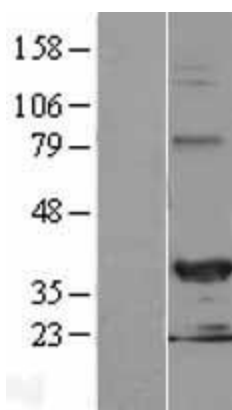
MW: 35.8 kDa

Gene Summary: This gene encodes a member of the hairy and enhancer of split-related (HESR) family of basic helix-loop-helix (bHLH)-type transcription factors. The encoded protein forms homo- or hetero-dimers that localize to the nucleus and interact with a histone deacetylase complex to repress transcription. Expression of this gene is induced by the Notch signal transduction pathway. Two similar and redundant genes in mouse are required for embryonic cardiovascular development, and are also implicated in neurogenesis and somitogenesis. Alternatively spliced transcript variants have been found, but their biological validity has not been determined. [provided by RefSeq, Jul 2008]

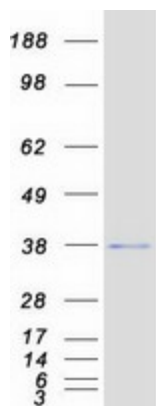
Product images:



Circular map for RC202544



Western blot validation of overexpression lysate (Cat# [LY402181]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202544 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HEY2 protein (Cat# [TP302544]). The protein was produced from HEK293T cells transfected with HEY2 cDNA clone (Cat# RC202544) using MegaTran 2.0 (Cat# [TT210002]).