

Product datasheet for **RC219805**

TDRKH (NM_006862) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TDRKH (NM_006862) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TDRKH
Synonyms:	TDRD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC219805 representing NM_006862
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCTACTGAACGGACTTCTTGGACAAGCCTGTCCACCATTAGAAAATAGCCCTGGGCCCTGGGATCC
 CAGCCAGTGCAACAGTTGCCTATATCCTATACCGCAGGTATAGGGAAAGCAGAGAAGAGCGGCTGACATT
 TGTGGGGAAGATGACATTGAGATAGAGATGCGGGTCCCCAGGAGGCTGTGAAACTCATCATTGGCCGG
 CAAGGAGCCAATATTAACAGCTGCGGAAACAGACAGGTGCTCGGATTGATGTGGACACAGAGGTAGT
 GCGATGAGCGAGTGTCTTATCAGTGGTTTTCTGTTCAGGTGTGCAAGGCCAAAGCAGCAATCCATCA
 GATCCTGACAGAGAATACCCAGTGTCTGAGCAGCTTTCAGTCCCCAGAGATCTGTGGCAGAATCATA
 GGGAGAGGCGCGAGACAATTCGTTCTATCTGTAAGGCATCTGGAGCCAAAATTACCTGTGACAAAGAT
 CAGAAGGGACATTACTACTATCAAGACTTATAAAAATCTCAGGAACACAGAAGGAAGTGGCAGCAGCCAA
 GCATTTGATACTGGAGAAAGTTTCAGAAGATGAAGAACTTCGGAAGAGAATTGCTCATTCTGCAGAAACC
 AGGGTCCACGCAACAGCCAATCAGTGTGAGAAGAGAAGACATGACAGAGCCAGGTGGAGCTGGAGAGC
 CAGCATTATGGAAAAACACCAGTTCTAGCATGGAGCCGACTGCACCCCTGGTGACTCCTCCACCCAAAGG
 AGGAGGCGACATGGCTGTGGTAGTGTCAAAGGAAGGTTCTGGGAGAAACCTAGTGATGACAGCTTTCAG
 AAGTCTGAAGCCAGGCCATCCCAGAGATGCCATGTTTGAATCCCCAGTCTGACTTCAGTTTTCATG
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 CTCCCGCAGCCTGCAATTGGATAAGCTTGCAATGAGATGACCCAGCACTATGAGAATAGTGTGCCTGAA
 GACTTGACTGTGCATGTAGGAGACATTGTAGCAGCACCTTACCTACAAATGGTTCCTGGATCGAGCCC
 GGGTCTCGGCACCTTGGAGAATGGGAACCTGGACCTCTATTTTGTGACTTTGGAGATAATGGAGATTG
 CCCACTGAAGGACCTCAGGGCTCTCAGGAGTACTTCTAAGCCTTCCATTTCAAGCAATAGAATGTAGT
 CTGGCACGGATTGCTCCCTCAGGTGACCAGTGGGAAGAGGAAGCTTTGGATGAGTTTGATAGACTCACTC
 ATTGTGCTGACTGGAAGCCTCTGGTAGCCAAGATCTCTAGCTATGTCCAGACTGGGATCTCAACTGGCC
 AAAGATCTACTTATGATACTAGCAATGGGAAGAACTTGATATTGGGCTAGAATTAGTACACAAAGGA
 TACGCAATTGAGCTTCTGAAGACATAGAAGAAAACAGAGCTGTCCAGACATGTTGAAGGACATGGCCA
 CAGAAACAGATGCCTCTCTCAGCACGTTGCTCACTGAGACAAAAGAGCTCTGGAGAGATAACACATAC
 CCTGTCCTGCCTCAGCTTATCAGAAGCTGCTTCCATGTCTGGTGTGATAACCTGAAGATGACTACTTA
 CTCGGAAGTCTGGGCTTCAGTTTGTCTCAGCCATCTGCTTTGCTGTATGTTGCCTGCAATGAAGTCTGTA
 AGCATGCTCAGCCCTGGAAGTGGTGTACCAGAGTTCCGTAGGGAACCTTACTCTTTAGAGGTTCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219805 representing NM_006862
 Red=Cloning site Green=Tags(s)

MSTERTSWTSLSTIQKIALGLGIPASATVAYILYRRYRESREERLTFVGEDDIEIEMRVPQEAVKLIIGR
 QGANIKQLRKQTGARIDVDTEVDGERVLLISGFPVQVCKAKAAIHQILTENTPVSEQLSVPQRSVGRII
 GRGGETIRSICKASGAKITCDKESEGLLLL SRL IKISGTQKEVAAAKHLILEKVSEDEELRKRIHSAET
 RVPRKQPI SVRREDMTEPGGAGEPALWKNTSSSMEPTAPLVTPPKGGDMAVVVSKEGSWEKPSDDSFQ
 KSEAQAIPMPMFEIPSPDFSFHADEYLEVYVSASEHPNHFVIQIVGSRSLQLDKLVNEMTQHYENSYPE
 DLTVHVGDIVAAPLPTNGSWYRVRVLTLENGNLDLYFVDFGDNDCPLKDLRALRSDFLSLPFQAI ECS
 LARIAPSGDQWEEELDEFDRLTHCADWKPLVAKISSYVQTGISTWPKIYLYDTSNGKLDIGLELVHKG
 YATELPEDIEENRAVPDMLKDMATETDASLSTLLTETKSSGEITHL SCLSLSEAA SMSGDDNLED DYL
 LGS LGF SLLSHLLCCMLPAMNSLKHAQPWNWCYQSSVGNLYSLEVP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8008_e08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006862

ORF Size: 1818 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_006862.2](#), [NP_006853.1](#)

RefSeq Size: 2331 bp

RefSeq ORF: 1686 bp

Locus ID: 11022

UniProt ID: [Q9Y2W6](#)

Cytogenetics: 1q21.3

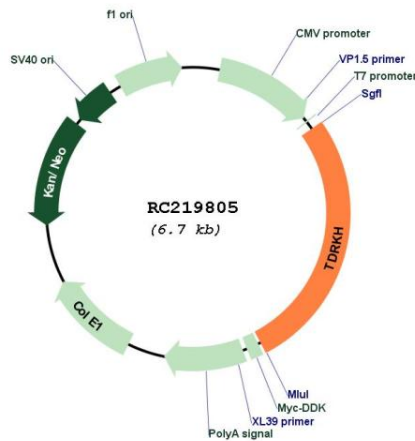
Domains: TUDOR, KH, TUDOR

Protein Families: Transmembrane

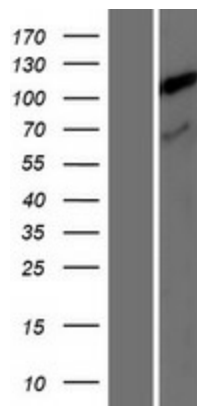
MW: 67.02 kDa

Gene Summary: Participates in the primary piRNA biogenesis pathway and is required during spermatogenesis to repress transposable elements and prevent their mobilization, which is essential for the germline integrity. The piRNA metabolic process mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and govern the methylation and subsequent repression of transposons. Required for the final steps of primary piRNA biogenesis by participating in the processing of 31-37 nt intermediates into mature piRNAs. May act in pi-bodies and piP-bodies by transferring piRNA precursors or intermediates to or between these granules.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC219805



Western blot validation of overexpression lysate (Cat# [LY416369]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219805 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).