OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG222658

TDRKH (NM_001083965) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TDRKH (NM_001083965) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TDRKH
Synonyms:	TDRD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG222658 representing NM_001083965
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTACTGAACGGACTTCTTGGACAAGCCTGTCCACCATTCAGAAAATAGCCCTGGGCCTTGGGATCC
CAGCCAGTGCAACAGTTGCCTATATCCTATACCGCAGGTATAGGGAAAGCAGAGAAGAGCGGCTGACATT
TGTTGGGGAAGATGACATTGAGATAGAGATGCGGGTTCCCCAGGAGGCTGTGAAACTCATCATTGGCCGG
CAAGGAGCCAATATTAAACAGCTGCGGAAACAGACAGGTGCTCGGATTGATGTGGACACAGAGGATGTAG
GCGATGAGCGAGTGCTGCTTATCAGTGGTTTTCCTGTTCAGGTGTGCAAGGCCAAAGCAGCAATCCATCA
GATCCTGACAGAGAATACCCCAGTGTCTGAGCAGCTTTCAGTTCCCCAGAGATCTGTGGGCAGAATCATA
GGGAGAGGCGGCGAGACAATTCGTTCTATCTGTAAGGCATCTGGAGCCAAAATTACCTGTGACAAAGAAT
CAGAAGGGACATTACTACTATCAAGACTTATAAAAATCTCAGGAACACAGAAGGAAGTGGCAGCAGCCAA
GCATTTGATACTGGAGAAAGTTTCAGAAGATGAAGAACTTCGGAAGAGAATTGCTCATTCTGCAGAAACC
AGGGTCCCACGCAAACAGCCAATCAGTGTGAGAAGAGAAGACATGACAGAGCCAGGTGGAGCTGGAGAGC
CAGCATTATGGAAAAACACCAGTTCTAGCATGGAGCCGACTGCACCCCTGGTGACTCCTCCACCCAAAGG
AGGAGGCGACATGGCTGTGGTAGTGTCAAAGGAAGGTTCCTGGGAGAAACCTAGTGATGACAGCTTTCAG
AAGTCTGAAGCCCAGGCCATCCCAGAGATGCCCATGTTTGAAATCCCCAGTCCTGACTTCAGTTTTCATG
CTGATGAGTACCTAGAAGTCTACGTTTCTGCTTCTGAGCACCCTAACCACTTCTGGATCCAGATCGTTGG
CTCCCGCAGCCTGCAATTGGATAAGCTTGTCAATGAGATGACCCAGCACTATGAGAATAGTGTGCCTGAA
GACTTGACTGTGCATGTAGGAGACATTGTAGCAGCACCTTTACCTACAAATGGTTCCTGGTATCGAGCCC
GGGTCCTCGGCACCTTGGAGAATGGGAACTTGGACCTCTATTTTGTTGACTTTGGAGATAATGGAGATTG
CCCACTGAAGGACCTCAGGGCTCTCAGGAGTGACTTCCTAAGCCTTCCATTTCAAGCAATAGAATGTAGT
CTGGCACGGATTGCTCCCTCAGGTGACCAGTGGGAAGAGGAAGCTTTGGATGAGTTTGATAGACTCACTC
ATTGTGCTGACTGGAAGCCTCTGGTAGCCAAGATCTCTAGCTATGTCCAGACTGGGATCTCAACTTGGCC
AAAGATCTACTTATATGATACTAGCAATGGGAAGAAACTTGATATTGGGCTAGAATTAGTACACAAAGGA
TACGCAATTGAGCTTCCTGAAGACATAGAAGAAAACAGAGCTGTCCCAGACATGTTGAAGGACATGGCCA
CAGAAACAGATGCCTCTCTCAGCACGTTGCTCACTGAGACCAAAAAGAGCTCTGGAGAGATAACACATAC
CCTGTCCTGCCTCAGCTTATCAGAAGCTGCTTCCATGTCTGGTGATGATAACCTTGAAGATGACTACTTA
CTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

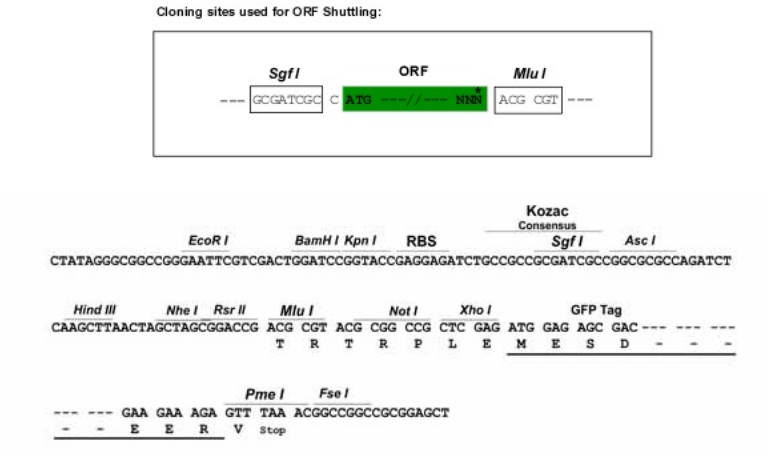
>RG222658 representing NM_001083965
Red=Cloning site Green=Tags(s)

MSTERTSWTSLSTIQKIALGLGIPASATVAYILYRRYRESREERLTFVGEDDIEIEMRVPQEAVKLIIGR
QGANIKQLRKQTGARIDVDTEDVGDERVLLISGFPVQVCKAKAAIHQILTENTPVSEQLSVPQRSVGRII
GRGGETIRSICKASGAKITCDKESEGTLLLSRLIKISGTQKEVAAAKHLILEKVSEDEELRKRIAHSAET
RVPRKQPISVRREDMTEPGGAGEPALWKNTSSSMEPTAPLVTPPPKGGGDMAVVVSKEGSWEKPSDDSFQ
KSEAQAIPEMPMFEIPSPDFSFHADEYLEVYVSASEHPNHFWIQIVGSRSLQLDKLVNEMTQHYENSVPE
DLTVHVGDIVAAPLPTNGSWYRARVLGTLENGNLDLYFVDFGDNGDCPLKDLRALRSDFLSLPFQAIECS
LARIAPSGDQWEEEALDEFDRLTHCADWKPLVAKISSYVQTGISTWPKIYLYDTSNGKKLDIGLELVHKG
YAIELPEDIEENRAVPDMLKDMATETDASLSTLLTETKKSSGEITHTLSCLSLSEAASMSGDDNLEDDYL
L

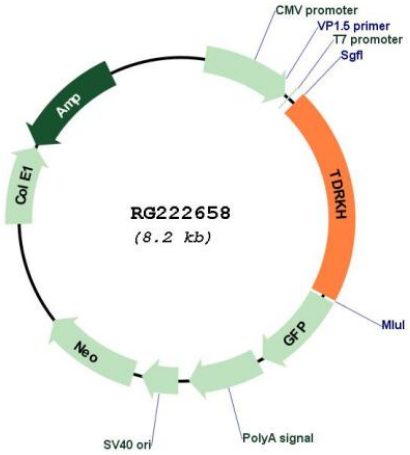
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001083965

ORF Size: 1683 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_001083965.2
RefSeq Size:	2854 bp
RefSeq ORF:	1686 bp
Locus ID:	11022
UniProt ID:	Q9Y2W6
Cytogenetics:	1q21.3
Protein Families:	Transmembrane
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]