

Product datasheet for **RG205453**

HORMAD2 (NM_152510) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	HORMAD2
Synonyms:	CT46.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG205453 representing NM_152510
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGCCACTGCTCAGCTTTCTCACTGCATCACAATACACAAGGCTTCTAAGGAAACAGTTTTCCCATCCC
AAATCACTAATGAGCATGAGTCATTGAAAATGGTGAAGAACTTTTGCTACTTCCATCTCATGTATAAC
ATACCTAAGGGGCCTGTTCCAGAGAGCTCTTATGGAGAAGCCATTTGGATGACCTCAGTTAAAAATC
CTCCGAGAAGATAAAAAATGTCCGGGTCACTGCATATTATCAGATGGATTCAAGGTTGTTTGATGCTT
TGGAAAAGAGATACTACGTATGGCAGTACTGACACTTTACACAGATCCCATGGGATCTGAGAAGGTGAC
TGAGATGTACCAGTTCAAATCAAATACACGAAAGAAGGAGCCACTATGGATTTTGACAGTCATAGCAGC
AGTACAAGCTTTGAAAGTGAACAACAATGAAGATATTAAGAAAGCCAGTGTTCTACTGATCCGTAAT
TGTATATACTGATGCAGGACCTTGAGCCACTTCCTAATAATGTTGTACTTACTATGAACTCCACTACTA
TAATGCAGTGACCCACATGATTACCAACCCCTCGGTTTTAAAGAAGGGTAAATTCACACTTCCTGCTG
TTTGACAAGGAGCCTATCAACGTGCAAGTGGGATTTGTCTCCACTGGCTTTCATAGCATGAAAGTAAAG
TCATGACAGAGGCTACAAAAGTGATTGATTTGGAGAACAATCTGTTTCGGGAGAACAGCACTACTGAGAT
CGCCCATCAGGGTCTAGACTGTGATGAGGAAGAAGAATGCAATGACCATTCAAAGAATGAATTTGTG
TGCAGTCAGCAAAGTTCTGAGTGCTCCAGGAAGAAGAGGAAGGTCACTGAACCAAGTGAAGGTCCTCATCC
CTAACAGAAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



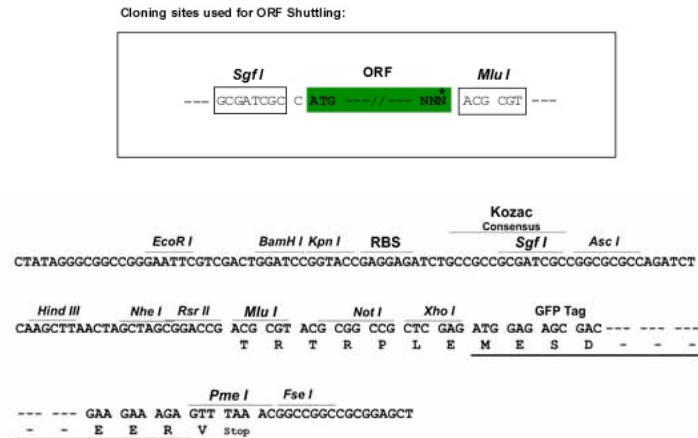
Protein Sequence: >RG205453 representing NM_152510
 Red=Cloning site Green=Tags(s)

MATAQLSHCITIHKASKETVFPQSQITNEHESLKMVKLKFATSI SCITYLRGLFPESYGERHLDLSLKI
 LREDKKCPGSLHIIRWIQGCDALEKRYLRMAVLTLYTDPMGSEKVTMYQFKFKYKKEGATMDFDSHSS
 STSFESGTNNEDIKKASVLLIRKLYILMQDLEPLPNNVLTMLHYYNVTPHDYQPLGFKEGVNSHFL
 FDKEPINVQVGFVSTGFHSMKVVMTEATKVIDLENNLFRENSTTEIAHQGLDCDEEEECNDHIQRMNFV
 CSQQSSECSRKKRVSEPVKVFIPNRK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_152510

ORF Size: 921 bp

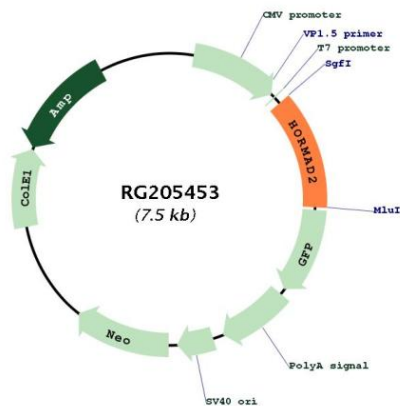
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_152510.4</u>
RefSeq Size:	1914 bp
RefSeq ORF:	924 bp
Locus ID:	150280
UniProt ID:	<u>Q8N7B1</u>
Cytogenetics:	22q12.2
Gene Summary:	Essential for synapsis surveillance during meiotic prophase via the recruitment of ATR activity. Plays a key role in the male mid-pachytene checkpoint and the female meiotic prophase checkpoint: required for efficient build-up of ATR activity on unsynapsed chromosome regions, a process believed to form the basis of meiotic silencing of unsynapsed chromatin (MSUC) and meiotic prophase quality control in both sexes. Required for the DNA double-strand break-independent, BRCA1-dependent activation of ATR on the sex chromosomes that is essential for normal sex body formation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG205453