

Product datasheet for **RC214455**

ZCWPW1 (NM_017984) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZCWPW1 (NM_017984) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZCWPW1
Synonyms:	ZCW1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC214455 representing NM_017984
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGATGACAACGTTGCAGAATAAAGAAGAATGTGGAAAGGGACCAAGAGAATCTTTGCCCCACCTGCAC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214455 representing NM_017984
Red=Cloning site Green=Tags(s)

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MMTTLQNKEECGKPKRIFAPPAQKSYSLLPCSPNSPKEETPGI SSPETEARISLPKASLKKKKEEKATMK
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NLF GFWSRFNGSNSNGERKDLQLSGLNSPGSCLEKKEKEELEEKEEKEKTDPILPIRKRVIQTQKTKPR
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LQHSNSDGEDFPVALFGK
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8030_h07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017984

ORF Size: 1944 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_017984.5](#)

RefSeq Size: 2356 bp

RefSeq ORF: 1947 bp

Locus ID: 55063

UniProt ID: [Q9H0M4](#)

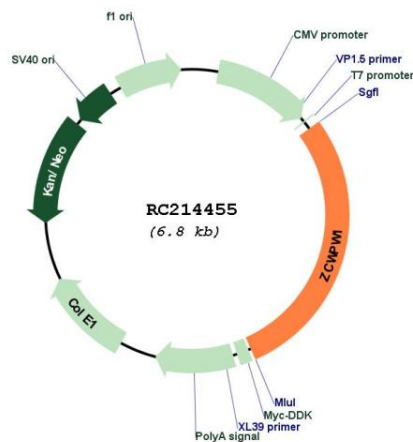
Cytogenetics: 7q22.1

Domains: PWWP

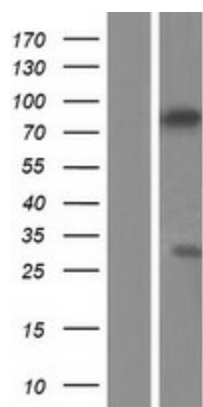
MW: 71.8 kDa

Gene Summary: Dual histone methylation reader specific for PRDM9-catalyzed histone marks (H3K4me3 and H3K36me3) (PubMed:32744506, PubMed:20826339). Facilitates the repair of PRDM9-induced meiotic double-strand breaks (DSBs) (By similarity). Essential for male fertility and spermatogenesis (By similarity). Required for meiosis prophase I progression in male but not in female germ cells (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC214455



Western blot validation of overexpression lysate (Cat# [LY413393]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214455 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).