

## Product datasheet for **RC208316**

### **C21orf45 (MIS18A) (NM\_018944) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	C21orf45 (MIS18A) (NM_018944) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C21orf45
Synonyms:	B28; C21orf45; C21orf46; FASP1; hMis18alpha; MIS18alpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208316 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGGCGTTCGGTCACTGAGGTGTAGCAGAGGATGCGCTGGCGGCTGTGAGTGCGGCGACAAGGGCA  
AATGCAGCGACTCCTCGCTGTTGGGCAAGAGACTCTCCGAAGACTCGAGCCGCCACCAGCTGTTGCAGAA  
GTGGGCGAGCATGTGGAGCTCCATGAGCGAAGACGCGTCGGTGGCCGACATGGAGAGGGCGCAGCTGGAG  
GAGGAGGCGCGGCTGCGGAGGAGAGGCCGCTGGTGTTCCTGTGCTCCGGCTGCCGGCGGCCGCTGGGCC  
ACTCGCTGAGCTGGGTGGCCAGCCAGGAGGACACCAACTGCATCCTGCTTCGCTGTGTTTCTGTAATGT  
TTCTGTGGATAAGGAACAGAAGCTATCCAAACGTGAAAAGGAAAATGGTTGCGTCCTTGAGACTTTGTGC  
TGCCGGGGGTGCTCACTCAATCTTGCTACGTGTACAGATGCACGCCAAGAATCTTGATTACAAGAGAG  
ACTTGTGTTTGCCTCAGTGTGAAGCCATTGAAAGTTATGTTTTAGGGTCCTCTGAAAAGCAAATTTGTGC  
AGAAGATAAGAGCTTTTAAATCTTGAAGCAGAGTTGAAATAGAAAAGTCTCTAACACAGATGGAAGAT  
GTCTTGAAGCATTACAAATGAAGCTGTGGGAGGCCGAATCCAAATGTCTTTGCCACTGTAAAAAGC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC208316 protein sequence  
Red=Cloning site Green=Tags(s)

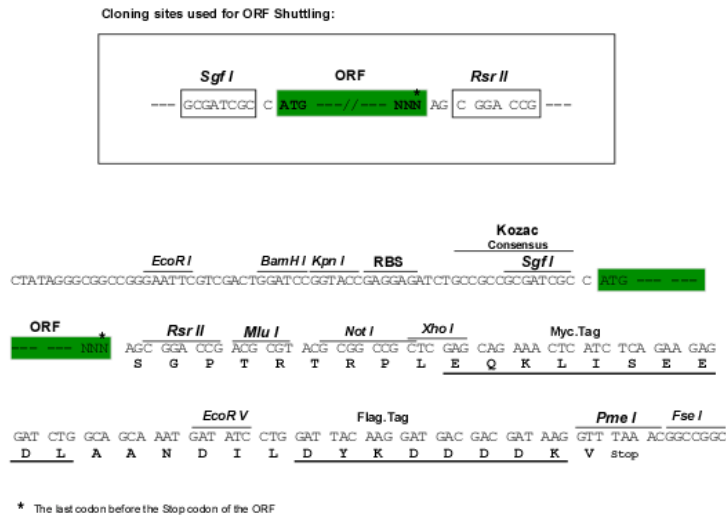
MAGVRSRLRCSRGCAGGCECGDKGKCSDSLLGKRLSEDSSRHQLLQKWASMWSSMSSEDASVADMERAAQLE  
 EEAAAAEERPLVFLCSGCRRLGDSLWVASQEDTNCILLRCVSCNVSDKEQKLSKREKENGCVLETLC  
 CAGCSLNLGYVYRCTPKNLDYKRDLFCLSVIAIESYVLGSSEKQIVSEDKELFNLESRVEIEKSLTQMED  
 VLKALQMKLWEAESKLSFATCKS

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6801\\_e01.zip](https://cdn.origene.com/chromatograms/mk6801_e01.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_018944

**ORF Size:** 699 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\\_018944.3](#)

**RefSeq Size:** 1587 bp

**RefSeq ORF:** 702 bp

**Locus ID:** 54069

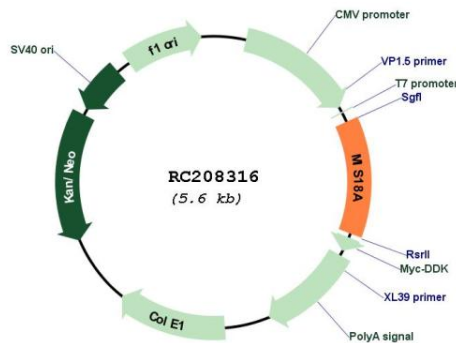
**UniProt ID:** [Q9NYP9](#)

**Cytogenetics:** 21q22.11

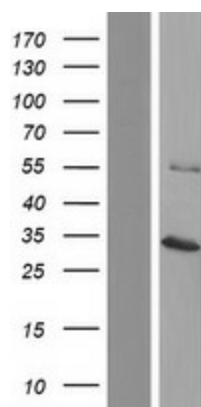
**MW:** 25.9 kDa

**Gene Summary:** Required for recruitment of CENPA to centromeres and normal chromosome segregation during mitosis.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RC208316



Western blot validation of overexpression lysate (Cat# [LY412868]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208316 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).