

## Product datasheet for **MG222368**

### Dbf4 (NM\_001190717) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dbf4 (NM_001190717) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dbf4
Synonyms:	AA545217; Ask
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MG222368 representing NM\_001190717  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAACCTCGAGACCATGAGGATCCACAGCAAAGCACCTCTCCCGGTGGCATCCAAGACAGAAATGAAA  
AGAATCGACCATCCTTGAAATCCCTGAAGGCTGATAATAGACTGGAAAAATCCAAATATAAGCCCTTTG  
GGGAAAAATATTTTACCTTGACTTGCCCTCTATCACCATATGTGAGAAACTACAAAAAGATATAAGGAA  
CTCGGAGGGCGAGTTGAAGAATTTCTCAGCAAAGATATCAGTTATTTTGTTCAAATAAAAAAGGAAGCAA  
AGTATGCACAGACATTGGGTGCGTTTTCTCCTGTACCAAGTCCAGAATCTGCATATACTGCAGAAACCAC  
CTCTCCTCATCCCAGCCATGATGGAAGTTCCTTTAAGTCTCAAGACAGAGTATGTTTGAGCCGAGGAAAA  
TTGTTAGTGA AAAAGCTGTGAAGGATCATGATTTTATTCCTGCTAATAGTATATTATCAAATGCCTTAT  
CATGGGGAGTAAAGATTCTTCATATTGATGACATTCGATACTACATTGAACAGAAGAAGAAAGCACTGAG  
TGCACTCAAGAAATCCAGTGCTTCTGGGAAGGATGCGGGGAAAAAGCTGGTCTGGAATACAAAAGACA  
AGAACAGGGAGACTCAAGAAGCCTTTTTAAAGGTTGAAGATGTGAACCGGTGCTACAGGCCATTTTACC  
TTCAGCTCCCCAGTCTGCCGTGTATAAACTACTTTCTTCAGAAGCCCTGCAGTCCGTTTGTATATAGAGAA  
GTCATCCAGCGTCCAGAAACAAGCTCAGCCCAAGCTCAGAATTAATATGGACGGCGATAAATGTGGAACC  
CCAGTTCAACTCCAGTTGAAGGAAAAGAGAAAAAAGGATATTGTGAATGTTGCTTACAGAAATACGAAG  
ATCTCGAAACTCACCTTCTGAGTGAGAAACACAGGAACCTTGCACAGAGTAAACAGTATCAAGTTGTTGA  
TGATATTGTATCTCAGTTAGTTTTCGATTTTGTGGAATATGGAAGAGACACACCTCAAAAGAAAAGAATA  
AGATACAGTGTGCGGTCCCTTTCTTCTGTTTCTGCAATGTCTGAAAAACACTGCACCGAAGGAGAAGC  
CACTCTTGGAGCCCAATTTCCAGAAGGACGTGGGCGAAAGCAGTGGGCACCTGCTCAAGCCGAACCTCA  
GTATGAAGAAACCCAGAAACCTGAAGAAAAGCATGGGTTTGCTTCAGAGCCACAACTATTCTTCAGCT  
GGATTGAAAGGATGTGACAGGAAACAGTGAAGCATGTTCAATGCAAGTGAAGCCTGACCCAGAGCAGGAGT  
ATGCACAGCTACCTCTGCGTGACAGCACACCGGAACACCAAGTGAACCGAGGGTAGAAATGACGGAGAACA  
GAGAGTAGACCCTGCTCCAGGCGTGTGCGAGTCATGTGGACAAGTTTCTCATCTCAGTACAGAAAGTAAT  
CTACCCCAACCACAGTTAGCTGCAGACATTACACAGCTTTCAGCAAAAGATCTGCAAGAAAAGGGCTTTC  
ATGTTGTGATAGGTCATGCTTCTGACCTGGTGGCATTAAATACATCAAAAGAGCAGCTAACAAATGAAGGC  
GAGAACTCCACCCTGTAGTCCCCAGGAGCCTCATGAGTGTGACACTGAGAACATGGAGAATTTGCCTTGT  
GGTAAAAATCCAGCGGAAAGTGAGATGCTATTAGGGCAACAGAAAGCAAATGCTGAACCGAGTGCTGAAT  
TGGATAAAAAGAGAACTGAGTATCTTCTGCACATGAAGACAGAACTTGTGGGTCACCAAGTACAGTCTCT  
ATTGGACCTTTTTTCAGACAAGCGAGGAGAAATCAGAAATTTTGGGTTTTACAGGCTACACTGAAAACAGT  
GGAATATGTGATGTTTTAGATATTTGGGAGGAAGAAAATCAAGTACCCTGTTGTCAACGTTTTTTTTCTT  
CCCCTCAACTTCTGCATTCTGTTGGATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG222368 representing NM\_001190717  
 Red=Cloning site Green=Tags(s)

MNLETMRIHSKAPLPGGIQDRNEKNRPSLKSLKADNRLEKSKYKPLWGKIFYLDLPSITICEKLQKDIKE  
 LGGRVEEFLSKDISYFVSNKKEAKYAQTLGRVSPVSPESAYTAETTSPPHSHDGSFQSQDRVCLSRGK  
 LLAEKAVKDHDFIPANSILSNALSWGKILHIDDIRYYIEQKKKALSALKKSSASGKDAGKKAGPGIQKT  
 RTGRLKKPFLKVEDVNRRCYRPFYQLPSLPCINYFLQKPCSPFDIEKSSSVQKQAQPKLRINMDGDKCGT  
 PVQLQLKEKRKKGYCECCLQKYEDLETHLLSEKHRNFAQSNQYQVVDIVSQLVDFVEYGRDTPQKKRI  
 RYVSGSLSSVSANVLKNTAPKEKPLLEPNFQKDVGESSGHLLKPNQYEEETQKPEEKHGFASEPTTYSSA  
 GLKGCDRKPVSMFNASEPDPEQEYAQLPLRDSTPEHQVTEGRNDGEQRVDPAPGVQSQCGQVSHLSTESN  
 LPQPQLAADITQLSAKDLQEKGFHVIGHASDLVALNTSKEQLTMKARTPPCSPQEPHECDTENMENLPC  
 GKIQRKVRMLLGQQKANAEPSEALDKRTEYLP AHEDRTC GSPVQSLDLDFQTSEEKSEFLGFTGYTENS  
 GICDVLDIWEEENSSTLLSTFFSSPSTSAFVGF

TRTRPLE - GFP Tag - V

**Restriction Sites:**

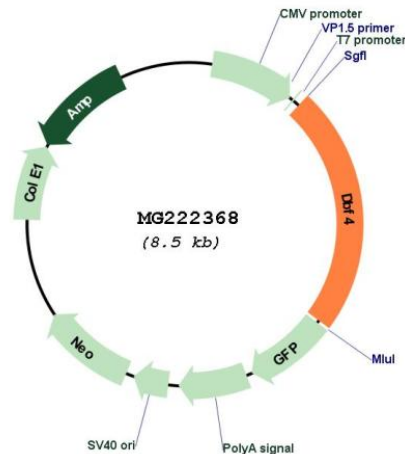
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_001190717

ORF Size: 1986 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\\_001190717.1](#), [NP\\_001177646.1](#)

RefSeq Size: 2441 bp

RefSeq ORF: 1989 bp

Locus ID: 27214

UniProt ID: [Q9QZ41](#)

Cytogenetics: 5 A1

**Gene Summary:** Regulatory subunit for CDC7 which activates its kinase activity thereby playing a central role DNA in replication and cell proliferation. Required for progression of S phase. The complex CDC7-DBF4A selectively phosphorylates MCM2 subunit at 'Ser-40' and 'Ser-53' and then is involved in regulating the initiation of DNA replication during cell cycle.[UniProtKB/Swiss-Prot Function]