

Product datasheet for **RC200778**

OBFC1 (STN1) (NM_024928) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OBFC1 (STN1) (NM_024928) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OBFC1
Synonyms:	AAF-44; AAF44; bA541N10.2; OBFC1; RPA-32
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200778 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCCTGGATCCAGCCGGTGTGAAGAGGAGACCCCTTCCTCTTGTGGGTTTGGATCCTGTGTTTC
TAGCCTTTGCAAACTCTACATCAGGGATATCCTGGACATGAAGGAGTCCCGCCAGGTGCCAGGTGATT
TTTGTACAATGGACATCCAATAAAACAGGTAGATGTCTTGGAACTGTCATTGGAGTGAGAGAAAGAGAT
GCTTTCTACAGTTATGGAGTGGATGACAGCACTGGAGTTATAAACTGCATCTGCTGGAAAAAGTTGAATA
CTGAGTCTGTATCAGCTGCTCCTAGTGCAGCAAGAGAGCTCAGCTTAACCTCACAACCTAAGAAGCTACA
AGAGACCATTTAGCAGAAAACAAAGATAGAGATCGGGGACACGATCCGAGTCAGAGGCAGTATCCGCACA
TACAGAGAAGAGCGAGAGATTATGCCACCGCTTACTATAAAGTGGACGACCCAGTGTGGAACATTCAAA
TTGCAAGGATGCTTGAGCTGCCACTATCTACAGGAAAGTTTATGACCAGCCTTTTCACAGCTCAGCCCT
AGAGAAAGAAGAGGCACTAAGCAATCCAGGCGCCCTGGACCTCCCGAGTCTCACGAGTTTGTGAGTGAA
AAAGCCAAAGAATTCTCATGGAGAACAGAGTGCAGAGCTTTTACCAGCAGGAGCTGAAATGGTGGAGT
CTTTGCTGTCCCTTGCCAATCAGCCTGTGATTCACAGTGCCTGCTCCGACCAAGTGAATTTAAGAAGGA
CACCACCTCCAAGGCAATTCATAGTATATTTAAGAATGCTATAACAACCTGCTGCAGGAAAAAGGACTTGTT
TTCCAGAAAGATGATGGTTTTGATAACCTATACTATGTAACCAGAGAAGACAAAGACCTGCACAGAAGA
TCCACCGGATCATTAGCAGGACTGCCAGAAACCAAATCACATGGAGAAGGGCTGTCACTTCTGCACAT
CTTGGCCTGTGCTCGCCTGAGCATCCGCCCGGGCTGAGCGAGGCTGTGCTGCAGCAAGTTCTGGAGCTC
CTGGAGGACCAGAGTGACATTGTCAGCACAATGGAGCACTACTACACAGCGTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC200778 protein sequence
 Red=Cloning site Green=Tags(s)

MQPGSSRCEEETPSLLWGLDPVFLAFKLYIRDILDMKESRQVPGVFLYNGHPKIQVDVLGTVIGVRERD
 AFYSYGVDSTGVINCICWKKLNTESVSAAPSAARELSLTSQLKKLQETIEQKTKIEIGDTRVRSIRT
 YREEREIHATAYYKVDPPVWNIQIARMLLEPTIYRKVYDQPFHSSALEKEEALSNPGALDPLSLTLLSE
 KAKEFLMERNVQSFYQQELEMVESLLSLANQPVVHSACSDQVNFKKDTSKAIHSIFKNAIQLLQEKGLV
 FQKDDGFNLYYVTREKDLHRKIHRIIQDQCQKPNHMEKGCHFLHILACARLSIRPGLSEAVLQQVLEL
 LEDQSDIVSTMEHYTAF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6417_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_024928

ORF Size: 1104 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_024928.3](#), [NP_079204.1](#)

RefSeq Size: 6483 bp

RefSeq ORF: 1107 bp

Locus ID: 79991

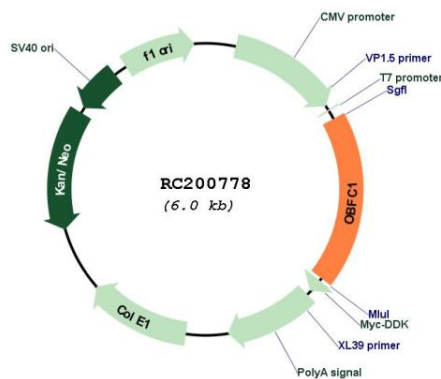
UniProt ID: [Q9H668](#)

Cytogenetics: 10q24.33

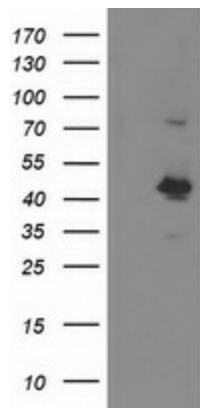
MW: 42.1 kDa

Gene Summary: OBFC1 and C17ORF68 (MIM 613129) are subunits of an alpha accessory factor (AAF) that stimulates the activity of DNA polymerase-alpha-primase (see MIM 176636), the enzyme that initiates DNA replication (Casteel et al., 2009 [PubMed 19119139]). OBFC1 also appears to function in a telomere-associated complex with C17ORF68 and TEN1 (C17ORF106; MIM 613130) (Miyake et al., 2009 [PubMed 19854130]).[supplied by OMIM, Nov 2009]

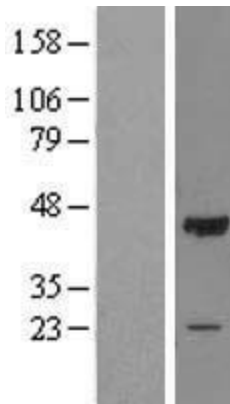
Product images:



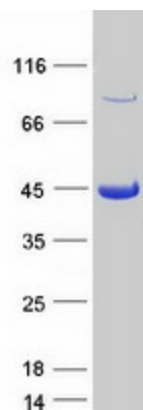
Circular map for RC200778



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY OBFC1 (Cat# RC200778, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-OBFC1 (Cat# [TA503240]). Positive lysates [LY410967] (100ug) and [LC410967] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410967]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200778 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STN1 protein (Cat# [TP300778]). The protein was produced from HEK293T cells transfected with STN1 cDNA clone (Cat# RC200778) using MegaTran 2.0 (Cat# [TT210002]).