

Product datasheet for **RC224920**

BRIT1 (MCPHI) (NM_024596) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	BRIT1
Synonyms:	BRIT1; MCT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC224920 representing NM_024596
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

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Protein Sequence:

>RC224920 representing NM_024596

Red=Cloning site Green=Tags(s)

MAAPILKDVVAYVEVWSSNGTENYSKFTTQLVDMGAKVSKTFNKQVTHVIFKDGYSQSTWDKAQKRGVKL
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 QKTNLDDVPILLFESNGSLIYTPTIEINSSHHSAMEKRLQEMKEKRENLSPTSSQMIQQSHDNPSNLC
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 IARGCVLSYDWLWSLELGHWISSEPFELSHHFPAAPLCRSECHLSAGPYRGTLFADQPAMFVSPASSP
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Chromatograms:

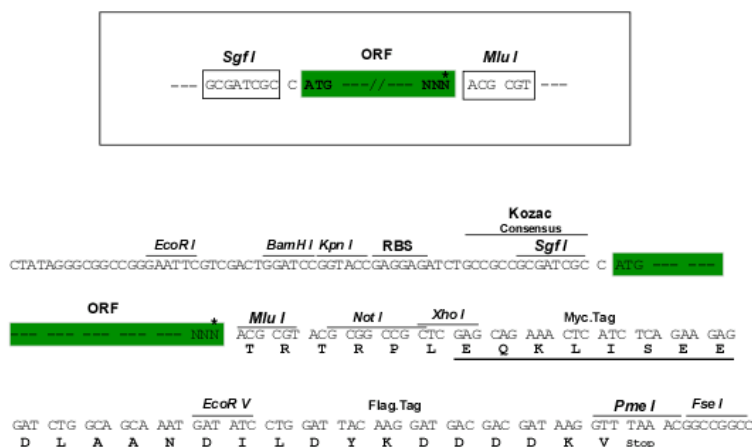
https://cdn.origene.com/chromatograms/mg2697_f06.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_024596

ORF Size: 2505 bp

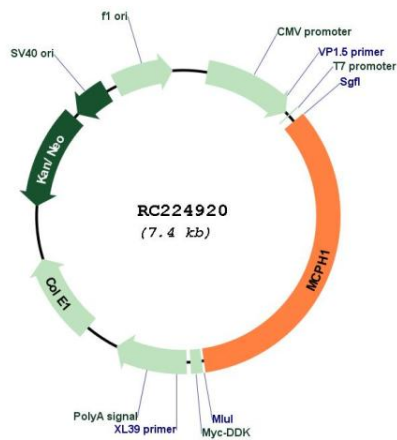
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

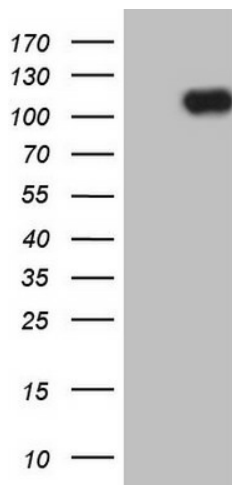
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_024596.5</u>
RefSeq Size:	8032 bp
RefSeq ORF:	2508 bp
Locus ID:	79648
UniProt ID:	<u>Q8NEM0</u>
Cytogenetics:	8p23.1
Domains:	BRCT
MW:	92.6 kDa
Gene Summary:	This gene encodes a DNA damage response protein. The encoded protein may play a role in G2/M checkpoint arrest via maintenance of inhibitory phosphorylation of cyclin-dependent kinase 1. Mutations in this gene have been associated with primary autosomal recessive microcephaly 1 and premature chromosome condensation syndrome. Alternatively spliced transcript variants have been described. [provided by RefSeq, Feb 2010]

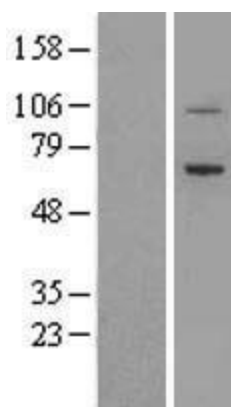
Product images:



Circular map for RC224920



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MCPH1 (Cat# RC224920, 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-MCPH1 (Cat# [TA804914]). Positive lysates [LY411212] (100ug) and [LC411212] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411212]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224920 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).