

Product datasheet for **RG230342**

BRIT1 (MCPH1) (NM_001172574) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BRIT1 (MCPH1) (NM_001172574) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BRIT1
Synonyms:	BRIT1; MCT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG230342 representing NM_001172574
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCGGCCCATCCTGAAAGATGTAGTGGCCTATGTTGAAGTGTGGTCATCCAATGGAACAGAAAATT
 ATTCAAAGACATTACAACACAGCTTGTGGATATGGGGGCAAAGTTTCAAAAACCTTTAAACAAACAAGT
 AACTCACGTTATCTTCAAAGATGGCTACCAGAGCACTTGGGACAAAGCTCAGAAGAGAGGCGTAAAGCTC
 GTTTCGGTGCTCTGGGTGAAAAATGCAGGACAGCTGGAGCACACATTGATGAATCATTGTTCCCTGCAG
 CTAATATGAATGAACACTTATCAAGCCTAATTAACAAAAACGTAATGTATGCAGCCCAAGATTTTAA
 TTTTAAACACCAGAAAATGATAAGAGATTTTCAAGAAATTTGAGAAAATGGCTAAAGAGCTACAAAGG
 CAAAAACAAATCTAGATGATGATGTACCTATTCTCTTATTTGAATCTAATGGTTCATTAATATATACTC
 CCACAATTGAAATTAATAGTAGTCACCACAGCGCAATGGAGAAGAGATTACAAGAGATGAAGGAGAAAAG
 GGAAAATCTTTCCCCACCTCTCCCAAATGATTCAGCAGTCTCATGATAATCCAAGTAACCTCTGTGT
 GAAGCACCTTTGAACATTTACGTGATACTTTGTGTTCAGATGAATACTTTGCTGGTGGCTTACACTCAT
 CTTTTGATGATCTTTGTGAAACTCAGGATGTGAAATCAGGAAAGGAAGTTGGAAGGATCCATTATGA
 CATTAAAGTGATGTGTGATTTTCTTCACTTGTATTGAAAGCAAATAATATTCATTATCACCATCTTTC
 ACTCACCTCGATAAATCAAGTCTCAGAAATTTCTGAGTAATCTTTCAAAGGAAGAAATAAACTTGCAAA
 GAAATATTGCAGGTAAAGTAGTCACCCCTGACCAAAAGCAGGCTGCAGGTATGTCTCAGGAGACGTTTGA
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 CTTAAGGAAAGGTATTCAGAGAATCTTCTCCTGAATCTCAGCTGCCATCAAGCCCTGCTCAGTTGAGCT
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 GAAGGCCGTGCAACTTCGAGTTGCGTGACTTCTGCCCTGAAGAAGCCCTAAGGTGTTGTAGACAGGCTG
 GGAAAGAAGACGCATGCCAGAGGGAATGGCTTTTCTTACACCATTGAGGACCTGCTCTTCCAAAAGG
 ACATGATGATGATTTAACTCCTTTGGAAGGAAGCCTTGAAGAAATGAAAGAAGCGGTTGGTCTGAAAAGC
 ACACAGAACAAAGGTACCACTTCCAAAATATCAAACTCCTCTGAAGGCGAAGCCAGAGTGAACATGAGC
 CATGTTTTATAGTTGACTGTAACATGGAGACGTCTACAGAAGAGAAGGAAAACCTTACCCGGAGGATACAG
 TGAAGATATG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

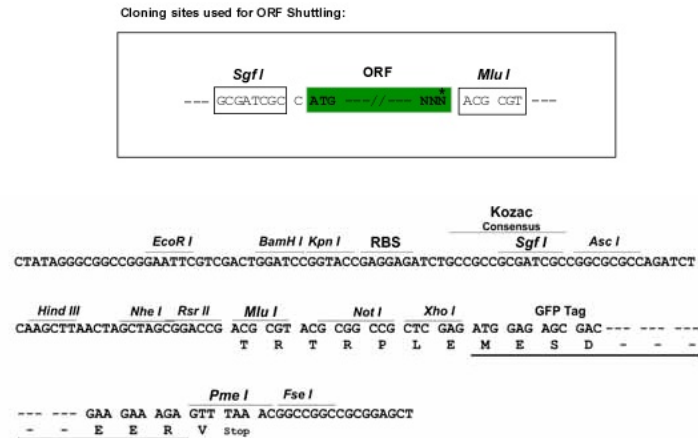
>RG230342 representing NM_001172574
 Red=Cloning site Green=Tags(s)

MAAPILKDVVAYVEVWSSNGTENYSKFTTQLVDMGAKVSKTFNKQVTHVIFKDGYSQSTWDKAQKRGVKL
 VSVLWVEKCRTAGAHIDESLFPANMNEHLSSLIKKKRCKMQPKDFNFKTPENDKRFQKKFEKMAKELQR
 QKTNLDDDDVPILLFESNGSLIYTPTIEINSSHHSAMEKRLQEMKEKRENLSPTSSQMIQQSHDNPSNSLC
 EAPLNISRDTLCSDEYFAGGLHSSFDDLGNSSGCGNQRKLEGSINDIKSDVCISLVLKANNIHSSPSF
 THLDKSSPQKFLSNLSKEEINLQRNIAGKVTPDQKQAAGMSQETFEKYRLSPTLSSTKGHLLIHSRPR
 SSSVKKRKRVS HSGSHSPPEKCKRKRSTRRSIMPRLQLCRSEDRLQHVAGPALEALSCGESSYDDYFSPDN
 LKERYSENLPPESQLPSSPAQLSCRSLSKKERTSIFEMSDFSCVGKKTRTVDITNFTAKTISSPRKTGNG
 EGRATSSCVTSAPEEALRCCRQAGKEDACPEGNGFSYTIEDPALPKGHDDDLTPLEGSLEEMKEAVGLKS
 TQNKGTTSKISNSSEGEAQSEHEPCFIVDCNMETSTEEKENLPGGYS GSM

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001172574

ORF Size: 1830 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_001172574.1](#), [NP_001166045.1](#)

RefSeq Size: 3773 bp

RefSeq ORF: 1833 bp

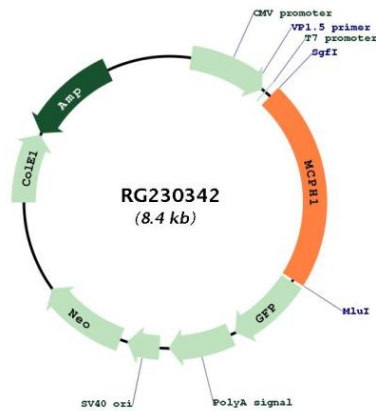
Locus ID: 79648

UniProt ID: [Q8NEM0](#)

Cytogenetics: 8p23.1

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 RG230342