

## Product datasheet for **MR224080**

### **Brd7 (NM\_012047) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Brd7 (NM_012047) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Brd7
Synonyms:	BP75; CELTIX1; Ptpn13ip
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR224080 representing NM\_012047  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGCAAGAAGCACAAGAAGCACAAGTCGGACCCTTCTACGAGGAGTACGTGGAGAAGCCCCTGA  
 AGCTGGTCTCAAAGTCGGGGGAGCGAGGTACCGAGCTCTCCACGGCAGCTCCGGGCACGACTCCAG  
 CCTCTTCGAAGACAGAAGCGACCATGACAAACACAAGGACAGAAAACGGAAAAAGAGGAAGAAAGCGGAG  
 AAGCAGGCTCCGGGGGAAGAGAAGGGGAGAAAACGGAGAAGAGTCAAGGAGGATAAAAAGAAGCGGGATC  
 GAGACCGTGCAGAGAATGAGGTGGACAGAGATCTCCAGTGTATGTCCCTATAAGATTAGACTTACCTCC  
 TGAGAAGCCTCTTACAAGCTCGTTAGCCAAACAAGAAGAAGTAGAACAGACACCCCTTCAGGAAGCTTTG  
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 AGGAGAGAATTCAGAGCCTGAAGCAGAGTATAGACTTCATGTGCACTTGCGAAAACTCGGAAGCAGAA  
 AGAACGAACAGATGCCTGTGAGAGTGGGGAGGACAGCGGCTGCTGGCAGCGGAGAGGGAAGACTCTGGA  
 GATGCTGAAACACAGGCCTTCAGAAGCCCGCTAAGGACAATAAAAGGAAAGACAAAGATGTGCTTGAAG  
 ACAATGGAGAAGCAGCAACTCAGAAAGGGAGCATGAGCAGATTGAGCGGTTGTCCAGGAGTCAGGAGG  
 CAAGCTAACACGGCGGCTGGCAAACAGTCAGTGTGAATTTGAAAGAAGAAAACAGATGGGACAACAACA  
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 ACCTTGCTGAACAAGTGACCAATAACCTCAAAGAACTCACACAGCAAGTACTCCAGGTGATGTTGTAAAG  
 CATAACGGAGTGCAGAAAAGCAATGGGGATTTCTGTTCTTCCCCATCGTGGGAAAACAGCTTCGTAGAT  
 TTGACAGGAGAGTGTGAAGAACCTAAGGAGACCAGCACTGCTGAGTGTGGGCCTGACCGGAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR224080 representing NM\_012047  
Red=Cloning site Green=Tags(s)

MGKHKHKHKSDFHFYEEYVEKPLKLVLVKVGSEVTELTGSSGHDSSLFEDRSDDHKHKDRKRKRKKE  
 KQAPGEEKGRKRRRVKEDKKKRRDRRAENEVDRDLQCHVPIRLDLPEKPLTSSLAKQEEVEQTPLQEAL  
 NQLMRQLQRKDPASAFFSFPVDFIAPGYSMIIKHPMDFSTMKEIKNNNDYQSIEELKDNFKLMCTNAMIY  
 NKPETIYYKAAKLLHSGMKILSQERIQSLKQSIDFMSDLQKTRKQKERTDACQSGEDSGCWQREREDSG  
 DAETQAFRSPAKDNKRKDKDVLLEDKWRSSNSEREHEQIERVVQESGGKLRRLANSQCFERRKPDGTTT  
 LGLLHPVDPIVGEPGYCPVRLGTTGRLQSGVNTLQGFKEDKRNRPVLPVLYLNYGPYSSYAPHYDSTFAN  
 ISKDDSDLIYSTYGEDSDLPNNFSISEFLATCQDYPYVMADSLLDVLTGKGHSRSLQDLDMSSPEDEGQT  
 RALDTAKEAEITQIEPTGRLESSQDRLTALQAVTTFGAPAEVFDSEAEVFORKLDDETRLLRELQEAQ  
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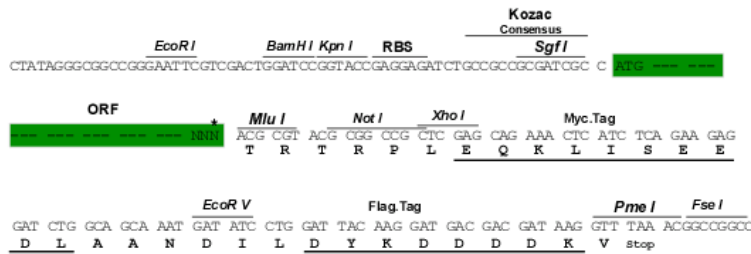
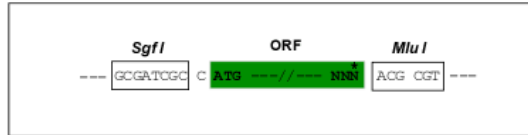
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9039\\_e04.zip](https://cdn.origene.com/chromatograms/mm9039_e04.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\_012047

**ORF Size:** 1953 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\\_012047.3](#)

**RefSeq Size:** 2370 bp

**RefSeq ORF:** 1956 bp

**Locus ID:** 26992

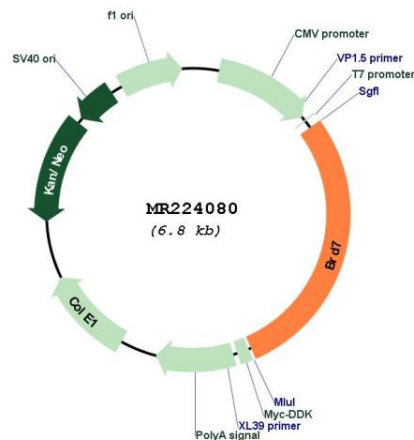
**UniProt ID:** [O88665](#)

**Cytogenetics:** 8 C3

**MW:** 74.4 kDa

**Gene Summary:** Acts both as coactivator and as corepressor. May play a role in chromatin remodeling. Transcriptional corepressor that down-regulates the expression of target genes. Binds to target promoters, leading to increased histone H3 acetylation at 'Lys-9' (H3K9ac). Binds to the ESR1 promoter. Recruits BRCA1 and POU2F1 to the ESR1 promoter. Coactivator for TP53-mediated activation of transcription of a set of target genes. Required for TP53-mediated cell-cycle arrest in response to oncogene activation. Promotes acetylation of TP53 at 'Lys-382', and thereby promotes efficient recruitment of TP53 to target promoters. Inhibits cell cycle progression from G1 to S phase (By similarity). Activator of the Wnt signaling pathway in a DVL1-dependent manner by negatively regulating the GSK3B phosphotransferase activity. Induces dephosphorylation of GSK3B at 'Tyr-216'. Down-regulates TRIM24-mediated activation of transcriptional activation by AR.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR224080