

## Product datasheet for **SC214394**

### **BRCA1 (NM\_007298) Human 3' UTR Clone**

#### **Product data:**

Product Type:	3' UTR Clones
Product Name:	BRCA1 (NM_007298) Human 3' UTR Clone
Symbol:	BRCA1
Synonyms:	BRCA1; BRCC1; BROVCA1; FANCS; IRIS; PNCA4; PPP1R53; PSCP; RNF53
Mammalian Cell Selection:	Neomycin
Vector:	pMirTarget (PS100062)
ACCN:	NM_007298
Insert Size:	1430 bp



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**Insert Sequence:** >SC214394 3'UTR clone of NM\_007298  
 The sequence shown below is from the reference sequence of NM\_007298. The complete sequence of this clone may contain minor differences, such as SNPs.  
 Blue=Stop Codon Red=Cloning site

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GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
ATACCCAGATCCCCACAGCCACTACTGACTGCAGCCAGCCACAGGTACAGAGCCACAGGACCCCAAG
AATGAGCTTACAAAGTGGCCTTTCCAGGCCCTGGGAGCTCCTCTCACTCTTCAGTCTTCTACTGTCTT
GGCTACTAAATATTTTATGTACATCAGCCTGAAAAGGACTTCTGGCTATGCAAGGGTCCCTTAAAGATT
TTCTGCTTGAAGTCTCCCTTGGAAATCTGCCATGAGCACAAAATTATGGTAATTTTTTACCTGAGAAGA
TTTTAAAACCATTTAAACGCCACCAATTGAGCAAGATGCTGATTCATTATTTATCAGCCCTATTCTTTC
TATTCAGGCTGTTGTTGGCTTAGGGCTGGAAGCACAGAGTGGCTTGGCCTCAAGAGAATAGCTGGTTTC
CCTAAGTTTACTTCTCTAAAACCTGTGTTCAAAAGGCAGAGAGTCAGACCCCTCAATGGAAGGAGAG
TGCTTGGGATCGATTATGTGACTTAAAGTCAGAATAGTCCTTGGGCAGTCTCAAATGTTGGAGTGGAA
CATTGGGGAGGAAATTCTGAGGCAGGTATTAGAAATGAAAAGGAAACTTGAAACCTGGGCATGGTGGCT
CACGCCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGCAGATCACTGGAGGTCAGGAGTTCGAAACC
AGCCTGGCCAACATGGTGAACCCCATCTCTACTAAAAATACAGAAATTAGCCGGTCATGGTGGTGGAC
ACCTGTAATCCCAGCTACTCAGGTGGCTAAGGCAGGAGAATCACTTCAGCCCGGGAGGTGGAGGTTGCA
GTGAGCCAAGATCATACCACGGCACTCCAGCCTGGGTGACAGTGAGACTGTGGCTCAAAAAAAAAAAAA
AAAAAAGGAAAATGAAACTAGAAGATTTCTAAAAGTCTGAGATATATTTGCTAGATTTCTAAAGAAT
GTGTTCTAAAACAGCAGAAGATTTCAAGAACCGGTTTCCAAAGACAGTCTTCTAATTCCTATTAGTA
ATAAGTAAAATGTTTATTGTTGAGCTCTGGTATATAATCCATTCTTAAAATATAAGACCTCTGGC
ATGAATATTTTCATATCTATAAAATGACAGATCCCACCAGGAAGGAGCTGTTGCTTCTTTGAGGTGAT
TTTTTCTTTGCTCCCTGTTGCTGAAACCATACAGTTCATAAAATAATTTGCTTGTGAAAGAAAGAA
AAAGTGTTTTTTATAAACCCATTATCCAGGACTGTTTATAGCTGTTGGAAGGACTAGGTCTTCCCTAGC
CCCCCAGTGTGCAAGGGCAGTGAAGACTTGATTGTACAAAATACGTTTTGTAATGTTGTGCTGTTAA
CACTGCAATAAACTTGGTAGCAAAACACTTCAAAAAAAAAAAAAAAAAAAAA
ACGCGTAAGCGGCCGCGGCATCTAGATTCAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA
CGAGATTCGATTCCACCGCCCTTCTATGAAAGG
  
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**Restriction Sites:** SgfI-MluI

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences, e.g., single nucleotide polymorphisms (SNPs).

**Components:** The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.

**RefSeq:** [NM\\_007298.3](#)

**Summary:**

This gene encodes a 190 kD nuclear phosphoprotein that plays a role in maintaining genomic stability, and it also acts as a tumor suppressor. The BRCA1 gene contains 22 exons spanning about 110 kb of DNA. The encoded protein combines with other tumor suppressors, DNA damage sensors, and signal transducers to form a large multi-subunit protein complex known as the BRCA1-associated genome surveillance complex (BASC). This gene product associates with RNA polymerase II, and through the C-terminal domain, also interacts with histone deacetylase complexes. This protein thus plays a role in transcription, DNA repair of double-stranded breaks, and recombination. Mutations in this gene are responsible for approximately 40% of inherited breast cancers and more than 80% of inherited breast and ovarian cancers. Alternative splicing plays a role in modulating the subcellular localization and physiological function of this gene. Many alternatively spliced transcript variants, some of which are disease-associated mutations, have been described for this gene, but the full-length natures of only some of these variants has been described. A related pseudogene, which is also located on chromosome 17, has been identified. [provided by RefSeq, May 2020]

**Locus ID:**

672

**MW:**

54.1