

Product datasheet for **SC214397**

BRCA1 (NM_007297) Human 3' UTR Clone

Product data:

Product Type:	3' UTR Clones
Product Name:	BRCA1 (NM_007297) Human 3' UTR Clone
Vector:	pMirTarget (PS100062)
Symbol:	BRCA1
Synonyms:	BRCA1; BRCC1; BROVCA1; FANCS; IRIS; PNCA4; PPP1R53; PSCP; RNF53
ACCN:	NM_007297
Insert Size:	1413 bp



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Insert Sequence: >SC214397 3'UTR clone of NM_007297
The sequence shown below is from the reference sequence of NM_007297. 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
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GTGAGCCAAGATCATACCACGGCACTCCAGCCTGGGTGACAGTGAGACTGTGGCTCAAAAAAAAAAAAA
AAAAAAGGAAAAATGAAACTAGAAGATTTCTAAAAGTCTGAGATATATTTGCTAGATTTCTAAAGAAT
GTGTTCTAAAACAGCAGAAGATTTCAAGAACCGGTTTCCAAAGACAGTCTTCTAATTCCTATTAGTA
ATAAGTAAAATGTTTATTGTTGAGCTCTGGTATATAATCCATTCTTAAAATATAAGACCTCTGGC
ATGAATATTTTATCTATAAAAATGACAGATCCCACCAGGAAGGAAAGCTGTTGCTTTCTTTGAGGTGAT
TTTTTCTTTGCTCCCTGTTGCTGAAACCATACAGTTCATAAAATAATTTGCTTGTGAAAGAAAGAA
AAAGTGTTTTTTATAAACCCATTATCCAGGACTGTTTATAGCTGTTGGAAGGACTAGGTCTTCCCTAGC
CCCCCAGTGTGCAAGGGCAGTGAAGACTTGATTGTACAAAATACGTTTTGTAATGTTGTGCTGTTAA
CACTGCAAATAAACTTGGTAGCAAACACTTCCA
ACGCGTAAGCGGCCGCGGCATCTAGATTCAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA
CGAGATTTGATTCCACCGCCCTTCTATGAAAGG
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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_007297.4](#)

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:

53.5