

Product datasheet for SC204287

OriGene Technologies, Inc.

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Topoisomerase II beta (TOP2B) (NM 001068) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones

Product Name: Topoisomerase II beta (TOP2B) (NM_001068) Human 3' UTR Clone

Symbol: Topoisomerase II beta

Synonyms: top2beta; TOPIIB

Mammalian Cell

Neomycin

Selection:

Vector:

pMirTarget (PS100062)

ACCN: NM 001068

Insert Size: 449 bp

Insert Sequence: >SC204287 3'UTR clone of NM_001068

The sequence shown below is from the reference sequence of NM_001068. The complete

sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG

TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC

GATGATGTTGATTTTGCAATGTTTAATTAAGTGCCCAAAGAGCACAAACATTTTTCAACAAATATCTTG TGTTGTCCTTTTGTCTCTCTGTCTCAGACTTTTGTACATCTGGCTTATTTTAATGTGATGATGTAATT GACGGTTTTTTATTATTGTGGTAGGCCTTTTAACATTTTGTTCTTACACATACAGTTTTATGCTCTTTT TTACTCATTGAAATGTCACGTACTGTCTGATTGGCTTGTAGAATTGTTATAGACTGCCGTGCATTAGCA CAGATTTTAATTGTCATGGTTACAAACTACAGACCTGCTTTTTGAAATGAAATTTAAACATTAAAAAATG GAACTGTGTTCTCTGTCTCTTTACTGAAGATAAAGGTGTAGTAAAAGCTCCCACACACCTTTAAAATAA

ATATATTTTATTCTTTGCAAAAAAAAAAAAAAAAA

CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: Sgfl-Mlul

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: <u>NM 001068.3</u>

Summary: This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic

[provided by RefSeq, Aug 2016]

states of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional stress that occurs during DNA transcription and replication. It catalyzes the transient breaking and rejoining of two strands of duplex DNA which allows the strands to pass through one another, thus altering the topology of DNA. Two forms of this enzyme exist as likely products of a gene duplication event. The gene encoding this form, beta, is localized to chromosome 3 and the alpha form is localized to chromosome 17. The gene encoding this enzyme functions as the target for several anticancer agents and a variety of mutations in this gene have been associated with the development of drug resistance. Reduced activity of this enzyme may also play a role in ataxia-telangiectasia. Alternative splicing results in multiple transcript variants.

Locus ID: 7155 **MW:** 17.2