

Product datasheet for **SC337989**

BLM (NM_001287247) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BLM (NM_001287247) Human Untagged Clone
Tag:	Tag Free
Symbol:	BLM
Synonyms:	BS; MGRISCE1; RECQ2; RECQL2; RECQL3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001287247, the custom clone sequence may differ by one or more nucleotides

```

ATGGCTGCTGTTCTCAAATAATCTACAGGAGCAACTAGAACGTCAGCCAGAACACTTAATAATA
AATTAAGTCTTTCAAACCAAAATTTTCAGGTTTCACTTTAAAAAGAAAACATCTTCAGATAACAATGT
ATCTGTAACATAATGTGTGTCAGTAGCAAAAACACCTGTATTAAGAAATAAAGATGTTAATGTTACCGAAGAC
TTTTCTTCAGTGAACCTCTACCCAACACCACAAATCAGCAAAGGGTCAAGGACTCTTTAAAAATGCTC
CAGCAGGACAGGAAACACAGAGAGGTGGATCAAATCATTATTGCCAGATTTCTGCAGACTCCGAAGGA
AGTTGTATGCACTACCAAAAACACCAACTGTAAAGAAATCCCGGATACTGCTCTCAAGAAATTAGAA
TTTAGTTCTTCACCAGATTCTTTAAGTACCATCAATGATTGGGATGATATGGATGACTTTGATACTCTG
AGACTTCAAATCATTGTTACACCACCCAAAGTCACTTTGTAAGAGTAAGCACTGCTCAGAAATCAAA
AAAGGGTAAGAGAAACTTTTTAAAGCACAGCTTTATACAACAAACACAGTAAAGACTGATTTGCCTCCA
CCCTCCTCTGAAAGCGAGCAAAATAGATTTGACTGAGGAACAGAAGGATGACTCAGAATGGTTAAGCAGCG
ATGTGATTTGCATCGATGATGGCCCAATTGCTGAAGTGCAATAAATGAAGATGCTCAGGAAAGTGACTC
TCTGAAACTCATTGGAAGATGAAAGAGATAATAGCGAAAAGAAGAAGAAATTTGGAAGAAGCTGAATTA
CATTCAACTGAGAAAGTCCATGTATTGAATTTGATGATGATTATGATACGGATTTTGTCCACCTT
CTCCAGAAGAAATTTTCTGCTTCTTCTCTCTTCAAATGCCTTAGTACGTTAAAGGACCTTGACAC
CTCTGACAGAAAAGAGGATGTTCTTAGCACATCAAAGATCTTTTGTCAAACCTGAGAAAATGAGTATG
CAGGAGCTGAATCCAGAAACCAGCACAGACTGTGACGCTAGACAGATAAGTTTACAGCAGCAGCTTATTC
ATGTGATGGAGCACATCTGTAATAATTGATACTATTCTGATGATAAACTGAACTTTTGATTGTGG
GAACGAACTGCTCAGCAGCGGAACATAAGAAGGAACTTCTAACGGAAGTAGATTTAATAAAAGTGAT
GCCAGTCTTCTGGCTCATTGTGGAGATACAGGCCTGATTCATTGATGGCCCTATGGAGGGTGATTCCT
GCCCTACAGGGAATTCTATGAAGGAGTTAAATTTTTCACACCTTCCCTCAAATCTGTTTCTCTGGGGA
CTGTTTACTGACTACCACCTAGGAAAGACAGGATCTCTGCCACCAGGAAGAATCTTTTGAAGGCCCT
TTATTCAATACCCATTTACAGAAGTCCTTTGTAAGTAGCAACTGGGCTGAAACACCAAGACTAGGAAAA
AAAATGAAAGCTTATTTCAGGAAATGTTCTCACAAGCACTGCTGTGAAAGATCAGAATAAACATAC

```



[View online »](#)

```

TGCTTCAATAAATGACTTAGAAAAGAGAAACCCAACCTTCCTATGATATTGATAATTTTGACATAGATGAC
TTTGATGATGATGACTGGGAAGACATAATGCATAATTTAGCAGCCAGCAAATCTCCACAGCTGCCT
ATCAACCCATCAAGGAAGGTCGGCCAATTAATCAGTATCAGAAAAGACTTTCCTCAGCCAAGACAGACTG
TCTTCCAGTGTCATCTACTGCTCAAAATATAAACTTCTCAGAGTCAATTCAGAATTATACTGACAAGTCA
GCACAAAATTTAGCATCCAGAAATCTGAAACATGAGCGTTTCCAAAGTCTTAGTTTTCTCATACAAAGG
AAATGATGAAGATTTTTCATAAAAAATTTGGCCTGCATAATTTAGAATAATCAGCTAGAGGCGATCAA
TGCTGCACTGCTTGGTGAAGACTGTTTTATCCTGATGCCGACTGGAGGTGTAAGAGTTTGTGTACCAG
CTCCCTGCCTGTGTTTCTCCTGGGGTCACTGTTGTCATTTCTCCCTTGAGATCACTTATCGTAGATCAAG
TCCAAAAGCTGACTTCCTTGATATTCCAGCTACATATCTGACAGGTGATAAGACTGACTCAGAAGCTAC
AAATATTTACCTCCAGTTATCAAAAAAGACCCAAATCATAAAACTTCTATATGCTACTCCAGAAAAGATC
TGTGCAAGTAACAGACTCATTTCTACTCTGGAGAATCTCTATGAGAGGAAGCTCTTGGCAGCTTTTGTTA
TTGATGAAGCACATTGTGCAGTCAGTGGGACATGATTTTCGCAAGATTACAAAAGAATGAATATGCT
TCGCCAGAAGTTTCTTCTGTTCCGGTGTGGCTCTTACGGCCACAGCTAATCCCAGGTACAGAAGGAC
ATCCTGACTCAGTGAAGATTCTCAGACCTCAGGTGTTTAGCATGAGCTTAAACAGACATAATCTGAAAT
ACTATGTATTACGAAAAAGCCTAAAAAGGTGGCATTGATTGCCTAGAATGGATCAGAAAAGCACCACC
ATATGATTCAGGGATAATTTACTGCCTCTCCAGGCGAGAATGTGACACCATGGCTGACACGTTACAGAGA
GATGGGCTCGCTGCTTCTGCTTACCATGCTGGCCTCAGTGATTCTGCCAGAGATGAAGTGCAGCAGAAGT
GGATTAATCAGGATGGCTGTGAGTTTACTGTGCTACAATTCATTTGGAATGGGGATTGACAAAACCGGA
CGTGCGATTTGTGATTTCATGCACTCTCCCTAAATCTGTGGAGGGTTACTACCAAGAATCTGGCAGAGCT
GGAAGAGATGGGGAAATATCTCACTGCCTGCTTTTCTATACCTATCATGATGTGACCAGACTGAAAAGAC
TTATAATGATGGAAAAAGATGGAACCATCACAAGAGAACTCACTTCAATAATTTGTATAGCATGGT
ACATTACTGTGAAAATATAACGGAATGCAGGAGAATACAGCTTTTGGCCTACTTTGGTAAAAATGGATTT
AATCCTGATTTTTGTAAGAAACACCCAGATGTTTCTTGTGATAATTGCTGTAAAACAAAGGATTATAAA
CAAGAGATGTGACTGACGATGTGAAAAGTATTGTAAGATTTGTTCAAGAACATAGTTCACACAAGGAAT
GAGAAATATAAACATGTAGGTCCTTCTGGAAGATTTACTATGAATATGCTGGTCGACATTTTCTTGAA
TCTTTATCTTCTGATCCTGAGGTTTTGCTTCAAATGATGGTGTACTGAAGACAAAAGTGGAAAAATATG
GTGCGGAAGTGATTTTCAAGTATTACAGAAATCTCTGAATGGACATCGCCAGCTGAAGACAGTTCCCCAGG
GATAAGCCTGTCCAGCAGCAGAGGCCCGGAAGAAGTCCCGCTGAGGAGCTCGACGAGGAAATACCCGTA
TCTTCCCCTACTTTGCAAGTAAAACAGAAATGAAAGGAAGAGGAAAAAGATGCCAGCCTCCCAAAGGT
CTAAGAGGAGAAAACTGCTCCAGTGGTCCAAGGCAAAGGGGGGTCTGCCACATGTAGAAAGATATC
TTCCAAAACGAAATCCTCCAGCATATTGGATCCAGTTCAGCCTCACATACTTCTCAAGCGACATCAGGA
GCCAATAGCAAATTTGGGATTATGGCTCCACCGAAGCCTATAAATAGACCCTTCTTAAGCCTTCATATG
CATTCTCATAA

```

- Restriction Sites:** Sgfl-MluI
- ACCN:** NM_001287247
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_001287247.1](#), [NP_001274176.1](#)

RefSeq Size: 4162 bp

RefSeq ORF: 3861 bp

Locus ID: 641

UniProt ID: [P54132](#)

Cytogenetics: 15q26.1

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Homologous recombination

Gene Summary: The Bloom syndrome is an autosomal recessive disorder characterized by growth deficiency, microcephaly and immunodeficiency among others. It is caused by homozygous or compound heterozygous mutation in the gene encoding DNA helicase RecQ protein on chromosome 15q26. This Bloom-associated helicase unwinds a variety of DNA substrates including Holliday junction, and is involved in several pathways contributing to the maintenance of genome stability. Identification of pathogenic Bloom variants is required for heterozygote testing in at-risk families. [provided by RefSeq, May 2020]
Transcript Variant: This variant (3) lacks two alternate in-frame exons in the 3' coding region compared to variant 1. The resulting protein (isoform 2) is shorter compared to isoform 1.
Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.