OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC224422

Blm (NM_007550) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Blm (NM_007550) Mouse Untagged Clone

Tag: Tag Free

Symbol: Blm

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF:

>MC224422 representing NM_007550
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGATCATGGCTGCTGTTCCTCTGAACAATCTACAAGAACAACTACAGCGACACTCAGCCAGAAAAC
TTAATAATCAACCCAGCCTTTCAAAACCAAAATCTTTAGGTTTTACTTTTAAAAAGAAAACATCAGAGGG
TGATGTGTCTGTCACTAGTGTGTCCGTAGTAAAAACACCTGCGTTAAGTGATAAAGATGTGAACGTGTCT
GAGGCCTTTTCATTCACTGAGTCTCCACTCCACAAACCAAAGCAGCAGGCAAAGATTGAAGGCTTCTTTA
AACATTTCCCTGGAAGGCAGCAAAGCAAGGGGACCTGCTCTGAGCCGTCACTGCCGGCCACGGTACAGAC
TGCTCAGGACACTTTGTGCACTACCCCCAAAACCCCCACTGCGAAGAAACTGCCCGTGGCTGTTTTCAAG
AAATTAGAATTTAGTTCTTCTGCAGACTCCCTCAGTGACTGGGCTGATATGGATGACTTTGATATGTCAG
CATCAGATGCGTTTGCTTCACTGGCTAAAAATCCTGCCACAAGAGTAAGCACCGCTCAGAAAATGAAAAA
GACTAAGAGAAACTTCTTTAAACCACCACCTCGTAAAGCCAATGCAGTAAAGACTGACTTGACTCCTCCC
TCCCCCGAATGCCTGCAAGTGGATTTAACGAAGGAATCGGAGGAGGAGGAGGAGGAGGAGGAGGCGG
AGGGGGCGGACTGCCTGAGCAGGGATGTGATCTGCATTGACAATGATTCTGCTTCTGAAGAGCTCACGGA
GAAAGACACGCAGGAAAGCCAGTCTTTGAAAGCTCACTTGGGAGCTGAAAGAGGTGACAGTGAAAAGAAG
AGCCATGAAGACGAAGCTGTGTTCCATTCAGTTCAGAACACTGAATACTTTGAACACAATGACAATGATT
ATGATATAGATTTTGTTCCACCTTCTCCAGAAGAAATCATCTCCACTGCTTCTTCCTCGTTGAAATGTTC
CAGTATGTTAAAGGATCTTGATGACTCTGACAAAGAAAAGGGCATTCTTAGCACCTCAGAAGAGCTTCTG
TCAAAACCAGAGGAAATGACCACACACAAGTCTGATGCAGGAACCAGTAAAGACTGTGATGCCCAGCAGA
TACGCATACAGCAGCAGCTTATTCATGTGATGGAGCACATCTGTAAGTTAGTTGATACTGTTCCTACTGA
TGAACTGGAAGCTTTGAATTGTGGGACCGAATTGCTTCAACAACGAAACATAAGGAGGAAGCTCCTAGCT
GAAGCAGGTTTTAATGGAAATGACGTCAGACTTCTGGGTTCTCTGTGGAGGCACAGGCCTGATTCACTTG
ATAACACAGTGCAGGGCGACTCCTGCCCTGTGGGGCATCCTAATAAAGAGTTAAATTCTCCATACCTTCT
CTCACATTCCCCTTCCACTGAGGAATGTTTACCCACCACCACTCCAGGAAAGACAGGATTCTCAGCCACC
CCGAAGAATCTCTTTGAAAGGCCGTTATTGAATTCCCATTTACAGAAGTCCTTTGTAAGTAGCAACTGGG
CTGAAACACCAAGGATGGAAAACAGGAACGAAAGCACTGACTTCCCAGGGAGTGTTCTCACCAGCACCAC
TGTGAAAGCTCAGAGTAAACAAGCTGCTTCAGGATGGAACGTAGAGAGACACGGCCAGGCTTCCTATGAT

View online »

ATCGATAACTTTAATATTGATGACTTTGATGATGATGATGATGATGATGACTGGGAAAACATAATGCACA
ATTTTCCAGCCAGCAAATCTTCCACAGCCACCTACCCACCCATCAAGGAAGGTGGGCCAGTTAAATCTCT
CTCAGAAAGGATTTCTTCAGCCAAGGCAAAGTTTCTTCCAGTGGTATCAACCGCTCAAAATACAAACCTC
TCAGAGTCAATTCAGAATTGCTCTGATAAGCTGGCCCAAAATTTATCATCAAAAAATCCAAAACATGAAC
ATTTTCAAAGTCTTAATTTTCCTCATACAAAAGAAATGATGAAGATTTTCCATAAGAAATTTGGCTTGCA
TAATTTTAGAACTAATCAGCTAGAGGCGATCAATGCTGCGCTGCTTGGTGAAGACTGCTTTATCCTAATG
CCCACTGGAGGAGGTAAAAGTTTGTGCTACCAGCTCCCTGCCTGTGTTTCTCCTGGGGTCACAATTGTCA
TTTCTCCCTTGAGATCACTAATAGTAGATCAAGTCCAAAAGCTGACTTCCTTTGATATTCCAGCTACATA
TCTGACAGGGGATAAGACTGACTCAGAAGCTGCAAATATTTACCTCCAATTATCCAAAAAAGACCCAATC
ATCAAGCTTTTGTATGTTACTCCAGAGAAGGTCTGTGCAAGTAACAGGCTGATTTCTACTCTGGAGAATC
TGTATGAGCGGAAGCTCTTGGCACGTTTTGTCATTGATGAAGCGCATTGTGTGAGTCAGTGGGGTCATGA
TTTTCGTCAAGATTACAAAAGGATGAATATGCTTCGCCAGAAGTTTCCTTCTGTTCCAGTGATGGCCCTC
ACGGCCACAGCGAACCCCAGGGTCCAGAAGGACATCCTCACTCAGCTGAAGATCCTCAGACCTCAGGTGT
TTAGCATGAGCTTTAACAGACACAATCTGAAGTACTATGTATTACCCAAGAAGCCCAAAAAAGTAGCATT
TGATTGCCTAGAGTGGATCAGAAAGCATCACCCTTATGACTCGGGGATAATTTACTGCCTCTCCAGGAGG
GAATGTGACACAATGGCTGACACTTTACAGAGAGAAGGCCTGGCTGCCCTGGCTTACCATGCGGGCCTCA
GTGACTCTGCCAGAGATGAGGTGCAGCACAAGTGGATCAACCAGGACAACTGCCAGGTTATCTGTGCGAC
AATTGCGTTTGGAATGGGAATTGACAAACCTGACGTGCGATTTGTGATTCATGCATCTCTTCCTAAATCT
ATGGAGGGTTATTATCAAGAATCCGGCCGAGCTGGAAGAGATGGGGAAATATCTCACTGCGTGCTTTTCT
ATACATATCATGATGTGACCAGACTGAAGAGACTTATAATGATGGAAAAAGATGGAAACTATCATACGAA
GGAAACTCACGTCAATAATCTATATAGCATGGTACATTACTGTGAAAACATAACGGAATGCAGAAGAATA
CAGCTTTTAGCTTACTTTGGTGAAAAAGGATTCAACCCTGATTTTTGTAAGAAATACCCAGATGTTTCTT
GTGACAATTGCTGTAAAACAAAGGATTATAAAACAAAAGATGTGACTGATGACGTGAAAAATATTATAAG
ATTTGTTCAAGAACACAGTTCATCACCAGGAACAAGAAATATAGGACCTGCTGGAAGATTTACTCTGAAC
ATGCTGGTCGACATTTTCTTGGGGAGCAAGAGTGCAAAAGTTAAGTCTGGAATATTTGGAAAGGGGACTA
CATATTCACGACATAATGCCGAAAGACTTTTTAAAAAGCTGATTCTAGACAAAATCCTGGATGAAGACTT
ATATATCAATGCCAATGACCAACCAATTGCCTATGTGATGCTAGGAACAAAAGCCCACAGTGTGCTGAGT
GGCCACTTGAAGGTGGACTTCATGGAAACGGAAAATTCCAGCAGTATTAAAAAACAAAAAGCTTTAGTGG
CCAAAGTATCCCAGAGAGAAGAGGTAGTTAAGAAATGTCTTGGAGAACTTACAGAGGTCTGCAAATTGCT
GGGGAAAGTCTTTGGTGTCCATTACTTCAATATTTTTAATACAGCCACACTCAAAAAGCTTGCAGAATCT
TTATCTTCTGATCCTGAGGTTTTGCTTCAGATTGATGGTGTTACCGAAGACAAGCTGGAAAAATATGGTG
CAGAAGTGATTCCAGTATTACAGAAGTACTCAGAATGGACAGTGCCAGCTGAGGATGGTTCCCCAGGCGC
CAGAGGCGCCCCAGAGGACACTGAGGAGGAGGAGGAGGAAGCGCCTGTATCTTCTCACTACTTTGCAAAT
CAAACTAGAAATGAAAGAAAGAGAAAGAAAATGTCAGCCACCCATAAGCCCAAGAGGAGAAGAACTAGTT
ACGGTGGCTTCAGAGCAAAGGGGGGCTCTACTACATGCAGAAAAACGACTTCTAAAAGTAAATTCTATGG
TGTAACTGGATCCCGCTCGGCCTCATGTGCTTCTCAGGCAACATCATCAGCCAGTAGAAAACTGGGGATT
ATGGCTCCTCCAAAGCCTGTAAATAGAACGTTCCTCAGGCCTTCATATGCCTTCTCCTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_007550

Insert Size: 4260 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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

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_007550.4, NP_031576.4

RefSeq Size: 4869 bp

RefSeq ORF: 4260 bp

Locus ID: 12144

UniProt ID: O88700

Cytogenetics: 7 45.65 cM

Gene Summary: ATP-dependent DNA helicase that unwinds single- and double-stranded DNA in a 3'-5' direction (PubMed:9840919). Participates in DNA replication and repair (By similarity). Involved in 5'-end resection of DNA during double-strand break (DSB) repair: unwinds DNA and recruits DNA2 which mediates the cleavage of 5'-ssDNA (PubMed:9840919). Negatively regulates sister chromatid exchange (SCE) (PubMed:9840919, PubMed:27010503). Stimulates DNA 4-way junction branch migration and DNA Holliday junction dissolution. Binds single-stranded DNA (ssDNA), forked duplex DNA and DNA Holliday junction (By similarity). [UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).