

Product datasheet for **MR230308**

Banp (NM_001285981) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Banp (NM_001285981) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Banp
Synonyms:	AA408158; SMAR1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230308 representing NM_001285981
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGTCAGAGCAGGACCTGGCGGATGTGGTTTCAGATTGCAGTGAAGACCTGAGCCCTGATCACCCAG
 TTGTTTTGGAGAATCATGTCGTGACAGATGATGATGAACCTGCCTTGAAGCGCCAGCGACTAGAGATCAA
 TTGCCAGGACCCCTCTATAAAGTCTTCTGTACTCTATTAACCAGACGATATGTTTGCGGTTGGATAGC
 ATTGAGGCCAAGCTGCAAGCTCTCGAGGCCACTTGCAAATCTCTGGAAGAGAAGCTAGACCTGGTCACCA
 AATAACAGCACAGTCCCATCCAGGTCCCATGGTGGCAGGTTCCCCTTGGCGCCACCCAGACCTGCAA
 CAAAGTGCATGCGCTGTTCTGGGCGTCGCGAGAACACCATCGTGGTAAAAGTGCCTGGTCAGGACGAC
 AGCCACAACGAAGATGGGGAGAGCGGGTCAGAGGCCAGTACTCCGTGTCTAACTGTGGCCAGCCAGGAA
 GCCAGAACATTGGAAGCAACGTCACTCATCACCTGAACTCCGAAGAGGACTATCCAATGGCACCTG
 GCTGGGCGATGAGAATAACCCTGAGATGCGGGTACGCTGTGCCATCATCCCTCCGACATGTTGCACATC
 AGCACCAACTGTCGCACGCGCGAGAAGATGGCGCTGACACTGCTGGACTACCTGTTCCACCGTGAGGTGC
 AGGCTGTGTCCAACCTGTCCGGCCAGGGCAAGCACGGGAAGAAGCAGCTGGACCCCTCACCATCTACGG
 CATCCGGTGTACCTCTTCTATAAATTTGGAATCACGGAATCTGACTGGTATCGGATCAAGCAGAGCATT
 GACTCCAAGTGCCGGACAGCCTGGCGCGGAAGCAGCGAGGCCAGAGCCTGGCGGTCAAGAGCTTCTCTC
 GGAGGACGCCATCCTCATCTCTTACAGTGCCTCAGAGACCATGATGGGAACCCCTCCTCCCACCACTGA
 GCTACAGCAGTCAAGCCACAGGCCCTACACTACGCCCTGGCCAACGCCAGCAGTCCAGATCCACCAG
 ATTGGGGAGGATGGACAGGTGCAAGTAATCCACAGGGCCACCTCCACATTGCCAGGTGCCTCAAGGGG
 AGCAGGTGCAGATCACACAGGACAGCGAGGGCAATCTGCAGATCCATCATGTGGGTGAGGATGCCAGTC
 GTGGGGCCTGTGCCAGAATCCCATTCTGTGCGGGTACTCAGTGGCCAGGCTAATCCCTCCCGACTT
 TGGCCTCTGGGAGGACACACTTGATCTGCCTGCTGGAATGAAATGATCCAGGTACTGCAGGGTGCTC
 AGCTCATAGCCGTGGCCTCTTACAGCCCTGCTGTACAGGAGTAGATGGGTGCGCTCTCCAGGGCAGTGA
 CATTACAGTTTCAATGTCCAGCTGGCGCTGTGAGTGACCACACAGCCGAGCGCAGACCCAGAGGCC
 CTGCAGCCACTCTGCAGCCGACATGCAGCTTGAACATGGGGCCATCCAGATCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230308 representing NM_001285981
 Red=Cloning site Green=Tags(s)

MMSEQDLADVQIAVEDLSPDHPVLENHVVTDDDEPALKRQRLEINCQDPSIKSFLYSINQTI CLR LDS
 IEAKLQALEATCKSLEEKLDLVTNKQHSPIQVPMVAGSPLGATQTCNKVRCVAVPGRRQNTIVVKVPGQDD
 SHNEDGESGSEASDSVSNCGQPGSQNIGSNVTLITLNSEEDYPNGTWLGDENNPENRVRCAIIPSDMLHI
 STNCRTAEKMAL TLLDYL FHREVQAVSNL SGQKGKQQLDPLTIYGRCHLFYKFGITESDWYRIKQSI
 DSKCRTAWRRKQRGQSLAVKFSRRTTPSSSSYSASETMMGT PPTSELQQSQPQALHYALANAQQVQIHQ
 IGEDGQVQVIPQGLHIAQVPQGEQVQITQDSEGNLQIHHVGDGQSWGLCQNPVPSGDSVAQANPSQL
 WPLGGDTL DLPAGNEMIQVLQGAQLIAVASSDPAATGVDGSP LQGS DIQVQYVQLAPVSDHTAAAQTAEA
 LQPTLQPDMQLEHGAIQIQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

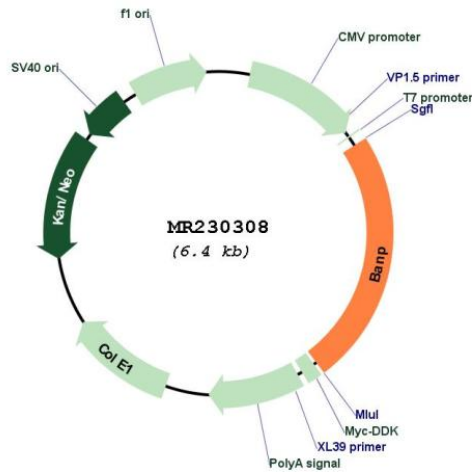
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001285981

ORF Size: 1527 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001285981.1](#), [NP_001272910.1](#)

RefSeq Size: 5381 bp

RefSeq ORF: 1530 bp

Locus ID: 53325

UniProt ID: [Q8VBU8](#)

Cytogenetics: 8 70.82 cM

MW: 55.8 kDa

Gene Summary: Controls V(D)J recombination during T-cell development by repressing T-cell receptor (TCR) beta enhancer function. Binds to scaffold/matrix attachment region beta (S/MARbeta), an ATC-rich DNA sequence located upstream of the TCR beta enhancer. Represses cyclin D1 transcription by recruiting HDAC1 to its promoter, thereby diminishing H3K9ac, H3S10ph and H4K8ac levels. Promotes TP53 'Ser-15' phosphorylation and nuclear accumulation, which causes cell cycle arrest and inhibits tumor growth.[UniProtKB/Swiss-Prot Function]