

Product datasheet for **RR215287**

Nabp1 (NM_001014216) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nabp1 (NM_001014216) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Nabp1
Synonyms: Obfc2a; RGD1306658
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR215287 representing NM_001014216
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCATGGGGTCAACGACCCTCCTCTTTTTATAAAAGACATTAAGGCCGGACTGAAAACTTAAATGTCC
 TCTTTATTGTCTGGAGATAGGACGAGTGACAAAACAAAGACGCCATGAAGTGAGATCTGCAAAGT
 AGCTGATAGAACGGGAAGCATCACTATTTCTGTGTGGGATGAGATCGGAGGGCTCATAACAGACAGGGGAT
 ATTATTGATTGACCAGAGGATATGCATCAATGTGAAAGGATGCCTGACTTTATACTGGAAGAGGTG
 GTGAACCTCAAAAAATTGGAGAATTTGTATGGTGTATTCAGAAGTGCCAAATTCAGTGAGCCAAACCC
 AGATTATAGAGGACAGCAGAACAGAGTGGTACAAAATGAACAGAAGGATAAAATGAACACCAGTATATTC
 GGGACAGTGGGAAATGGTGTTCAGACTGGCCCTGAATCTAGGGGATATCCTCTTCAATATGGCAGAAGCA
 ATGGCCCAGGACCCATCAGTCCACAGCTACCAGGAGAACCTAGTAATCAAACAGTCAGGACCACAATAAG
 TAATGCCAGAGATCCGAGGAGAGCCTTTAAAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR215287 representing NM_001014216
 Red=Cloning site Green=Tags(s)

MHGVDNPPPLFIKDIKAGLKNLNVVIFVLEIGRVTKTKDGHEVRSCKVADRTGSITISVWDEIGGLIQTGD
 IIRLTRGYASMWKGLTLYTGRGGELQKIGEFMYYSEVPNFSEPNPDYRQQNRVVQNEQKDKMNTSIF
 GTVGNVQTGPESRGYPLQYGRSNGPGPISPQLPGEPSNQTVRRTTISNARDPRAFKR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

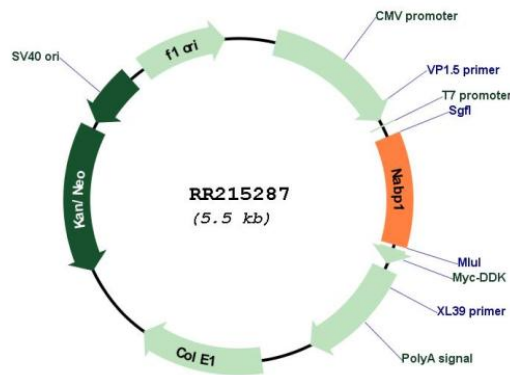


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM_001014216

ORF Size: 594 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_001014216.1](#), [NP_001014238.1](#)

RefSeq Size: 2321 bp

RefSeq ORF: 597 bp

Locus ID: 363227

UniProt ID: [Q5FVP2](#)

Cytogenetics: 9q22

MW: 21.9 kDa

Gene Summary: Component of the SOSS complex, a multiprotein complex that functions downstream of the MRN complex to promote DNA repair and G2/M checkpoint. In the SOSS complex, acts as a sensor of single-stranded DNA that binds to single-stranded DNA, in particular to polypyrimidines. The SOSS complex associates with DNA lesions and influences diverse endpoints in the cellular DNA damage response including cell-cycle checkpoint activation, recombinational repair and maintenance of genomic stability. Required for efficient homologous recombination-dependent repair of double-strand breaks (DSBs) and ATM-dependent signaling pathways (By similarity).[UniProtKB/Swiss-Prot Function]