

Product datasheet for MR201080

Nudt16l1 (BC025569) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nudt16l1 (BC025569) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Nudt16l1
Synonyms: 1110001K21Rik; 5330437I08Rik; Sdos
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201080 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGACCACGACGGTCCGGAGCTGAAACAGATCAGTCGGGAGGAAGCAATGCGCTTGGGGCCCGGCT
 GGAGTCATTCATGCCACGCCATGCTATACGCCCAACCCGGGAGCTTTTCGGACGTATCCCATGCG
 TTTCTCAGTGTGATGCAGATGCGCTTCGACGGGCTGCTAGGCTTTCCCGGGGTTTCGTGGACCGGCGC
 TTCTGGTCGCTGGAGGATGGCTTGAATCGGGTGTGGCCTGGCCTGGGCGGCTACGCCTACCGAAG
 CTGATTACCTGAGTTCACACCTGACTGAGGGTCCACACCGTGTGGTGGCACATCTGTACGCACGGCAGCT
 GACATTGGAACAACTGCATGCTGTGGAGATCAGCGCTGTGCACTACGGGACCACGGTCTGGAGGTGGG
 CTA**CTGCCTGGGGCCCGCCCCATTCCCACTCC**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201080 protein sequence
 Red=Cloning site Green=Tags(s)

MSTTTVPELKQISREEAMRLGPGWSHSCHAMLYAANPGQLFGRIPMRFVLMQMRFDGLLGFPGGFVDRR
 FWSLEDGLNRVLGLGLGLRLTEADYLSHLTEGPHRVVAHLVARQLTLEQLHAVEISAVHSRDHGLEVG
 LLPGARPHSHS

TRTRPLEQKLI**SEEDLA**ANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:



ACCN: BC025569

ORF Size: 453 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [BC025569](#), [AAH25569](#)

RefSeq Size: 1354 bp

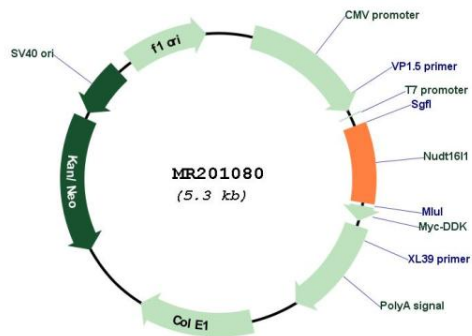
RefSeq ORF: 455 bp

Locus ID: 66911

Cytogenetics: 16 2.48 cM
MW: 16.7 kDa

Gene Summary: Key regulator of TP53BP1 required to stabilize TP53BP1 and regulate its recruitment to chromatin. In absence of DNA damage, interacts with the tandem Tudor-like domain of TP53BP1, masking the region that binds histone H4 dimethylated at 'Lys-20' (H4K20me2), thereby preventing TP53BP1 recruitment to chromatin and maintaining TP53BP1 localization to the nucleus. Following DNA damage, ATM-induced phosphorylation of TP53BP1 and subsequent recruitment of RIF1 leads to dissociate NUDT16L1/TIRR from TP53BP1, unmasking the tandem Tudor-like domain and allowing recruitment of TP53BP1 to DNA double strand breaks (DSBs). Binds U8 snoRNA.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201080