

## **Product datasheet for MG201080**

## Nudt16l1 (BC025569) Mouse Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Nudt16l1 (BC025569) Mouse Tagged ORF Clone

Tag: TurboGFP Symbol: Nudt16l1

**Synonyms:** 1110001K21Rik; 5330437I08Rik; Sdos

Mammalian Cell Neomycin

Selection:

Vector:

pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG201080 representing BC025569

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

CTACTGCCTGGGGCCCGCCCCATTCCCACTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG201080 representing BC025569

Red=Cloning site Green=Tags(s)

MSTTTVPELKQISREEAMRLGPGWSHSCHAMLYAANPGQLFGRIPMRFSVLMQMRFDGLLGFPGGFVDRR FWSLEDGLNRVLGLGLGGLRLTEADYLSSHLTEGPHRVVAHLYARQLTLEQLHAVEISAVHSRDHGLEVG

LLPGARPHSHS

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul



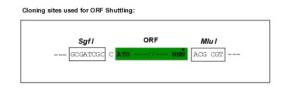
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

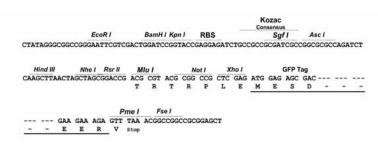
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

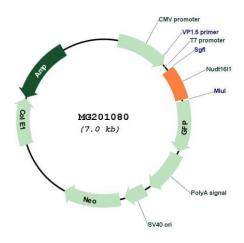


## **Cloning Scheme:**





## Plasmid Map:



**ACCN:** BC025569 **ORF Size:** 455 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:** <u>BC025569</u>, <u>AAH25569</u>

RefSeq Size: 1354 bp
RefSeq ORF: 455 bp
Locus ID: 66911

Cytogenetics: 16 2.48 cM

**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]