

Product datasheet for RC207113L4

OriGene Technologies, Inc.

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Thymine DNA glycosylase (TDG) (NM_003211) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Thymine DNA glycosylase (TDG) (NM_003211) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Thymine DNA glycosylase

Synonyms: hTDG

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

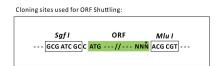
ORF Nucleotide The ORF insert of this clo

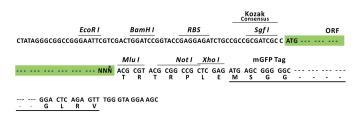
Sequence:

The ORF insert of this clone is exactly the same as(RC207113).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_003211

ORF Size: 1230 bp



Thymine DNA glycosylase (TDG) (NM_003211) Human Tagged Lenti ORF Clone - RC207113L4

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>NM 003211.3</u>

RefSeq Size: 3251 bp
RefSeq ORF: 1233 bp
Locus ID: 6996
UniProt ID: Q13569

UniProt ID: Q13569
Cytogenetics: 12q23.3

Domains: UDG

Protein Families: Druggable Genome
Protein Pathways: Base excision repair

MW: 46 kDa

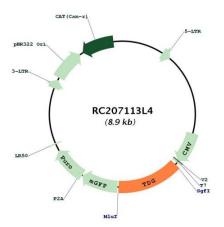
Gene Summary: The protein encoded by this gene belongs to the TDG/mug DNA glycosylase family. Thymine-

DNA glycosylase (TDG) removes thymine moieties from G/T mismatches by hydrolyzing the carbon-nitrogen bond between the sugar-phosphate backbone of DNA and the mispaired thymine. With lower activity, this enzyme also removes thymine from C/T and T/T mispairings. TDG can also remove uracil and 5-bromouracil from mispairings with guanine. This enzyme plays a central role in cellular defense against genetic mutation caused by the spontaneous deamination of 5-methylcytosine and cytosine. This gene may have a pseudogene in the p

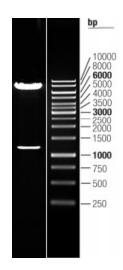
arm of chromosome 12. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC207113L4



Double digestion of RC207113L4 using Sgfl and Mlul