

Product datasheet for RC218547

DOT1L (NM_032482) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DOT1L (NM_032482) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DOT1L
Synonyms:	DOT1; KMT4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218547 representing NM_032482 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC218547 representing NM_032482
 Red=Cloning site Green=Tags(s)

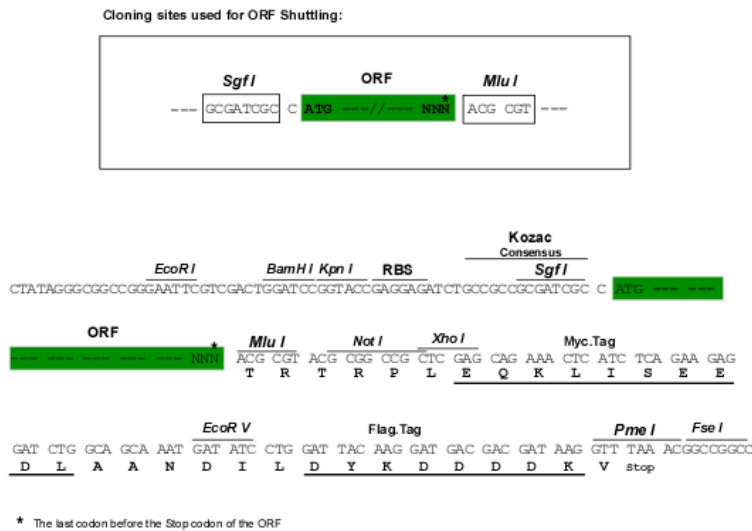
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_032482

ORF Size: 4611 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_032482.3](#)

RefSeq Size: 4889 bp

RefSeq ORF: 4614 bp

Locus ID: 84444

UniProt ID: [Q8TEK3](#)

Cytogenetics: 19p13.3

Domains: AT_hook

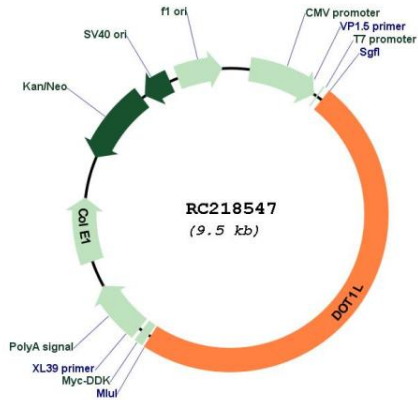
Protein Families: Druggable Genome

Protein Pathways: Lysine degradation

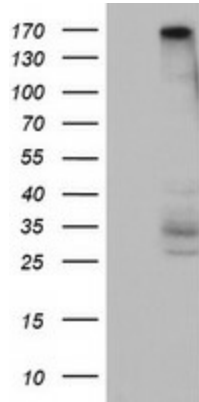
MW: 164.7 kDa

Gene Summary: The protein encoded by this gene is a histone methyltransferase that methylates lysine-79 of histone H3. It is inactive against free core histones, but shows significant histone methyltransferase activity against nucleosomes. [provided by RefSeq, Aug 2011]

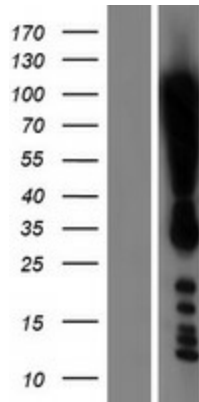
Product images:



Circular map for RC218547



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DOT1L (Cat# RC218547, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DOT1L (Cat# [TA802738]). Positive lysates [LY410109] (100ug) and [LC410109] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410109]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218547 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).