

Product datasheet for RC200036

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

HSPC152 (TRMT112) (NM_016404) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: HSPC152 (TRMT112) (NM_016404) Human Tagged ORF Clone

Tag:Myc-DDKSymbol:HSPC152

Synonyms: HSPC152; HSPC170; hTrm112; TRM112; TRMT11-2

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC200036 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

GCTGAGTGAAGAGGAAACTGAGAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA**

Protein Sequence: >RC200036 protein sequence

Red=Cloning site Green=Tags(s)

MKLLTHNLLSSHVRGVGSRGFPLRLQATEVRICPVEFNPNFVARMIPKVEWSAFLEAADNLRLIQVPKGP

VEGYEENEEFLRTMHHLLLEVEVIEGTLQCPESGRMFPISRGIPNMLLSEEETES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6418 e12.zip

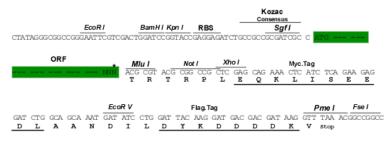
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





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

ACCN: NM_016404

ORF Size: 375 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 016404.3

 RefSeq Size:
 1305 bp

 RefSeq ORF:
 378 bp

 Locus ID:
 51504

 UniProt ID:
 Q9UI30



Cytogenetics: 11q13.1

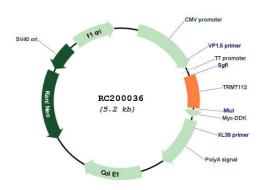
Domains: DUF343

MW: 14.2 kDa

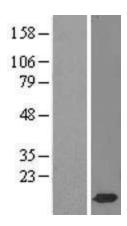
Gene Summary: Acts as an activator of both rRNA/tRNA and protein methyltransferases (PubMed:25851604).

Together with methyltransferase BUD23, methylates the N(7) position of a guanine in 18S rRNA (PubMed:25851604). The heterodimer with HEMK2/N6AMT1 catalyzes N5-methylation of ETF1 on 'Gln-185', using S-adenosyl L-methionine as methyl donor (PubMed:18539146). The heterodimer with ALKBH8 catalyzes the methylation of 5-carboxymethyl uridine to 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in target tRNA species (PubMed:20308323). Involved in the pre-rRNA processing steps leading to small-subunit rRNA production (PubMed:25851604).[UniProtKB/Swiss-Prot Function]

Product images:

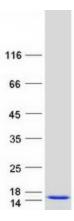


Circular map for RC200036



Western blot validation of overexpression lysate (Cat# [LY414001]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200036 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified TRMT112 protein (Cat# [TP300036]). The protein was produced from HEK293T cells transfected with TRMT112 cDNA clone (Cat# RC200036) using MegaTran 2.0 (Cat# [TT210002]).