

Product datasheet for MR223606L4

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

Ube3a (NM_173010) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Ube3a (NM 173010) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: Ube3a

Synonyms: 4732496B02; 5830462N02Rik; A130086L21Rik; Hpve6a; mKIAA4216

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 clone is exactly the same as(MR223606).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



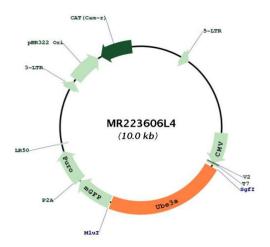


^{*} The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_173010 **ORF Size:** 2286 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>NM 173010.3</u>, <u>NP 766598.1</u>

RefSeq Size: 3888 bp RefSeq ORF: 2289 bp



Ube3a (NM_173010) Mouse Tagged Lenti ORF Clone - MR223606L4

 Locus ID:
 22215

 UniProt ID:
 008759

 Cytogenetics:
 7 33.95 cM

Gene Summary: E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme

in the form of a thioester and transfers it to its substrates. Several substrates have been identified including the ARNTL/BMAL1, ARC, RAD23A and RAD23B, MCM7 (which is involved in DNA replication), annexin A1, the PML tumor suppressor, and the cell cycle regulator CDKN1B (PubMed:20211139, PubMed:24728990). Additionally, may function as a cellular quality control ubiquitin ligase by helping the degradation of the cytoplasmic misfolded proteins. Finally, UBE3A also promotes its own degradation in vivo (By similarity). Plays an important role in the regulation of the circadian clock: involved in the ubiquitination of the core clock component ARNTL/BMAL1, leading to its proteasomal degradation (PubMed:24728990). Acts as a regulator of synaptic development by mediating ubiquitination and degradation of ARC

(PubMed:20211139). Synergizes with WBP2 in enhancing PGR activity (By similarity). [UniProtKB/Swiss-Prot Function]