

Product datasheet for MR219373L4V

OriGene Technologies, Inc.

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Slc30a10 (NM_001033286) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Slc30a10 (NM_001033286) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Slc30a10

Synonyms: E130106K10Rik; Gm212

Mammalian Cell

Selection:

Puromycin

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

Tag: mGFP

ACCN: NM_001033286

ORF Size: 1410 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(MR219373).

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. <u>More info</u>

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM 001033286.2</u>, <u>NP 001028458.1</u>

RefSeq Size: 5836 bp
RefSeq ORF: 1413 bp
Locus ID: 226781
UniProt ID: Q3UVU3

Cytogenetics: 1 H5





Gene Summary:

Plays a pivotal role in manganese transport. Manganese is an essential cation for the function of several enzymes, including some crucially important for the metabolism of neurotransmitters and other neuronal metabolic pathways. However, elevated levels of manganese are cytotoxic and induce oxidative stress, mitochondrial dysfunction and apoptosis. Acts as manganese efflux transporter and confers protection against manganese-induced cell death. Also acts as zinc transporter involved in zinc homeostasis. Seems to mediate zinc transport into early endosomes and recycling endosomes to prevent zinc toxicity; the function may be regulated by heterodimerization with other zinc transporters of the SLC30A subfamily. The SLC30A3:SLC30A10 heterodimer is involved in zinc transport-dependent regulation of the EGFR/ERK transduction pathway in endosomes. May be involved in regulation of zinc-dependent senescence of vascular smooth muscle cells. [UniProtKB/Swiss-Prot Function]