

## Product datasheet for **MR225394L3V**

### **Mcoln3 (NM\_134160) Mouse Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Mcoln3 (NM_134160) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Mcoln3
Synonyms:	6720490O21Rik; TRPML3; Va
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_134160
ORF Size:	1659 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR225394).
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. <a href="#">More info</a>
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:	<a href="#">NM_134160.1</a> , <a href="#">NP_598921.1</a>
RefSeq Size:	1712 bp
RefSeq ORF:	1662 bp
Locus ID:	171166
UniProt ID:	<a href="#">Q8R4F0</a>
Cytogenetics:	3 71.03 cM



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**Gene Summary:**

Nonselective ligand-gated cation channel probably playing a role in the regulation of membrane trafficking events. Acts as Ca(2+)-permeable cation channel with inwardly rectifying activity (PubMed:17989217). Mediates release of Ca(2+) from endosomes to the cytoplasm, contributes to endosomal acidification and is involved in the regulation of membrane trafficking and fusion in the endosomal pathway (By similarity). Does not seem to act as mechanosensory transduction channel in inner ear sensory hair cells. Proposed to play a critical role at the cochlear stereocilia ankle-link region during hair-bundle growth (PubMed:18801844). Involved in the regulation of autophagy. Through association with GABARAPL2 may be involved in autophagosome formation possibly providing Ca(2+) for the fusion process (PubMed:24269818). Through a possible and probably tissue-specific heteromerization with MCOLN1 may be at least in part involved in many lysosome-dependent cellular events. Possible heteromeric ion channel assemblies with TRPV5 show pharmacological similarity with TRPML3 (By similarity).[UniProtKB/Swiss-Prot Function]