

## Product datasheet for **MR221396L3V**

### Calhm1 (NM\_001081271) Mouse Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Calhm1 (NM_001081271) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Calhm1
Synonyms:	EG546729
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_001081271
ORF Size:	1044 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR221396).
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_001081271.1</a> , <a href="#">NP_001074740.1</a>
RefSeq Size:	1047 bp
RefSeq ORF:	1047 bp
Locus ID:	546729
UniProt ID:	<a href="#">D3Z291</a>
Cytogenetics:	19 C3



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**Gene Summary:**

Pore-forming subunit of a voltage-gated ion channel required for sensory perception of sweet, bitter and umami tastes. Specifically present in type II taste bud cells, where it plays a central role in sweet, bitter and umami taste perception by inducing ATP release from the cell, ATP acting as a neurotransmitter to activate afferent neural gustatory pathways. Acts both as a voltage-gated and calcium-activated ion channel: mediates neuronal excitability in response to changes in extracellular  $\text{Ca}^{2+}$  concentration. Has poor ion selectivity and forms a wide pore (around 14 Angstroms) that mediates permeation of  $\text{Ca}^{2+}$ ,  $\text{Na}^{+}$  and  $\text{K}^{+}$ , as well as permeation of monovalent anions. Acts as an activator of the ERK1 and ERK2 cascade. Triggers endoplasmic reticulum stress by reducing the calcium content of the endoplasmic reticulum. May indirectly control amyloid precursor protein (APP) proteolysis and aggregated amyloid-beta (A $\beta$ ) peptides levels in a  $\text{Ca}^{2+}$  dependent manner.[UniProtKB/Swiss-Prot Function]