

Product datasheet for MR227356L4

Gucy2d (NM_001130693) Mouse Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gucy2d (NM_001130693) Mouse Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Gucy2d
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR227356).
Restriction Sites:	Sgfl-MluI
Cloning Scheme:	

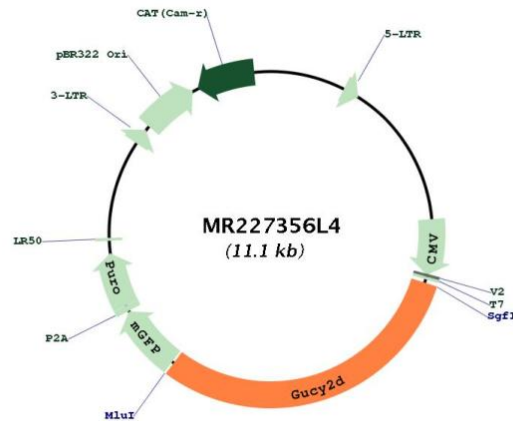
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.



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Plasmid Map:


ACCN: NM_001130693

ORF Size: 3351 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_001130693.3](#), [NP_001124165.1](#)

RefSeq Size: 3633 bp

RefSeq ORF: 3354 bp

Locus ID: 14918

UniProt ID: [A0A0U1RPR8](#)

Cytogenetics: 7 53.86 cM

Gene Summary: Functions as an olfactory receptor activated by urine odorants, uroguanylin and guanylin and as well by the volatile semiochemicals carbon disulfide (CS₂) and carbon dioxide (CO₂) (PubMed:17724338, PubMed:17702944, PubMed:20637621). Has guanylate cyclase activity upon binding of the ligand (By similarity). Activation of GUCY2D neurons leads to the cGMP-dependent activation of the CNGA3 channels, membrane depolarization and an increase in action potential frequency (PubMed:17724338, PubMed:20637621). Signaling pathways activated by GUCY2D may trigger social behaviors such as acquisition of food preference (PubMed:20637621).[UniProtKB/Swiss-Prot Function]