

Product datasheet for **MR204339L4V**

Ucp1 (NM_009463) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Ucp1 (NM_009463) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Ucp1
Synonyms:	AI385626; Slc25a7; Ucp
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_009463
ORF Size:	924 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR204339).
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.
RefSeq:	NM_009463.2
RefSeq Size:	1644 bp
RefSeq ORF:	924 bp
Locus ID:	22227
UniProt ID:	P12242
Cytogenetics:	8 39.65 cM



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Gene Summary:

Mitochondrial protein responsible for thermogenic respiration, a specialized capacity of brown adipose tissue and beige fat that participates to non-shivering adaptive thermogenesis to temperature and diet variations and more generally to the regulation of energy balance (PubMed:9139827, PubMed:19187776, PubMed:23063128, PubMed:27027295). Functions as a long-chain fatty acid/LCFA and proton symporter, simultaneously transporting one LCFA and one proton through the inner mitochondrial membrane. However, LCFAs remaining associated with the transporter via their hydrophobic tails, it results in an apparent transport of protons activated by LCFAs. Thereby, dissipates the mitochondrial proton gradient and converts the energy of substrate oxydation into heat instead of ATP (PubMed:23063128). Regulates the production of reactive oxygen species/ROS by mitochondria (PubMed:20416274, PubMed:20466728).[UniProtKB/Swiss-Prot Function]