

Product datasheet for **MR206222L4V**

Acaa2 (NM_177470) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Acaa2 (NM_177470) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Acaa2
Synonyms:	0610011L04Rik; AI255831; AI265397; D18ErtD240e
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_177470
ORF Size:	1194 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR206222).
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_177470.2 , NP_803421.1
RefSeq Size:	1500 bp
RefSeq ORF:	1194 bp
Locus ID:	52538
UniProt ID:	Q8BWT1
Cytogenetics:	18 50.76 cM



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Gene Summary:

In the production of energy from fats, this is one of the enzymes that catalyzes the last step of the mitochondrial beta-oxidation pathway, an aerobic process breaking down fatty acids into acetyl-CoA. Using free coenzyme A/CoA, catalyzes the thiolytic cleavage of medium- to long-chain unbranched 3-oxoacyl-CoAs into acetyl-CoA and a fatty acyl-CoA shortened by two carbon atoms. Also catalyzes the condensation of two acetyl-CoA molecules into acetoacetyl-CoA and could be involved in the production of ketone bodies. Also displays hydrolase activity on various fatty acyl-CoAs (By similarity). Thereby, could be responsible for the production of acetate in a side reaction to beta-oxidation (By similarity). Abolishes BNIP3-mediated apoptosis and mitochondrial damage (By similarity).[UniProtKB/Swiss-Prot Function]