OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR204727L3V

Akr1a1 (NM_021473) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Akr1a1 (NM_021473) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Akr1a1
Synonyms:	2610201A18Rik; Akr1a4
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_021473
ORF Size:	975 bp
ORF Nucleotide Sequence:	`The ORF insert of this clone is exactly the same as(MR204727).`
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_021473.3, NP_067448.1
RefSeq Size:	1435 bp
RefSeq ORF:	978 bp
Locus ID:	58810
UniProt ID:	Q9JII6
Cytogenetics:	4 D1

View online »

Gene Summary: Catalyzes the NADPH-dependent reduction of a wide variety of carbonyl-containing compounds to their corresponding alcohols. Displays enzymatic activity towards endogenous metabolites such as aromatic and aliphatic aldehydes, ketones, monosaccharides and bile acids, with a preference for negatively charged substrates, such as glucuronate and succinic semialdehyde (By similarity) (PubMed:22820017, PubMed:15769935, PubMed:20410296). Plays an important role in ascorbic acid biosynthesis by catalyzing the reduction of D-glucuronic acid and D-glucurono-gamma-lactone (PubMed:20410296, PubMed:15769935, PubMed:22820017). Functions as a detoxifiying enzyme by reducing a range of toxic aldehydes. Reduces methylglyoxal and 3-deoxyglucosone, which are present at elevated levels under hyperglycemic conditions and are cytotoxic (By similarity). Involved in the detoxification of lipid-derived aldehydes like acrolein (By similarity). Plays a role in the activation of procarcinogens, such as polycyclic aromatic hydrocarbon trans-dihydrodiols, and in the metabolism of various xenobiotics and drugs (By similarity). Displays no reductase activity towards retinoids (By similarity).[UniProtKB/Swiss-Prot Function]