

Product datasheet for **RC200505L4V**

ALDH2 (NM_000690) Human Tagged ORF Clone Lentiviral Particle

Product data:

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| Product Type: | Lentiviral Particles |
| Product Name: | ALDH2 (NM_000690) Human Tagged ORF Clone Lentiviral Particle |
| Symbol: | ALDH2 |
| Synonyms: | ALDH-E2; ALDHI; ALDM |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-mGFP-P2A-Puro (PS100093) |
| Tag: | mGFP |
| ACCN: | NM_000690 |
| ORF Size: | 1551 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RC200505). |
| 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_000690.2 |
| RefSeq Size: | 2076 bp |
| RefSeq ORF: | 1554 bp |
| Locus ID: | 217 |
| UniProt ID: | P05091 |
| Cytogenetics: | 12q24.12 |
| Domains: | aldedh |
| Protein Families: | Druggable Genome |



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| Protein Pathways: | Arginine and proline metabolism, Ascorbate and aldarate metabolism, beta-Alanine metabolism, Butanoate metabolism, Fatty acid metabolism, Glycerolipid metabolism, Glycolysis / Gluconeogenesis, Histidine metabolism, Limonene and pinene degradation, Lysine degradation, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism, Tryptophan metabolism, Valine, leucine and isoleucine degradation |
| MW: | 56.4 kDa |
| Gene Summary: | <p>This protein belongs to the aldehyde dehydrogenase family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of aldehyde dehydrogenase, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes, while approximately 50% of East Asians have the cytosolic isozyme but not the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among East Asians than among Caucasians could be related to the absence of a catalytically active form of the mitochondrial isozyme. The increased exposure to acetaldehyde in individuals with the catalytically inactive form may also confer greater susceptibility to many types of cancer. This gene encodes a mitochondrial isoform, which has a low Km for acetaldehydes, and is localized in mitochondrial matrix. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Nov 2016]</p> |