

Product datasheet for MR225787L4V

OriGene Technologies, Inc.

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Auts2 (NM_177047) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Auts2 (NM_177047) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Auts2

Synonyms: 2700063G02Rik; A730011F23Rik; D830032G16Rik

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_177047 **ORF Size:** 3783 bp

ORF Nucleotide

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Sequence:

The ORF insert of this clone is exactly the same as(MR225787).

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.

RefSeg: NM 177047.3, NP 796021.2

RefSeq Size: 6060 bp RefSeq ORF: 3786 bp Locus ID: 319974

UniProt ID: <u>A0A087WPF7</u>

Cytogenetics: 5 G2



Gene Summary:

Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. The PRC1-like complex that contains PCGF5, RNF2, CSNK2B, RYBP and AUTS2 has decreased histone H2A ubiquitination activity, due to the phosphorylation of RNF2 by CSNK2B. As a consequence, the complex mediates transcriptional activation (By similarity). In the cytoplasm, plays a role in axon and dendrite elongation and in neuronal migration during embryonic brain development. Promotes reorganization of the actin cytoskeleton, lamellipodia formation and neurite elongation via its interaction with RAC guanine nucleotide exchange factors, which then leads to the activation of RAC1 (PubMed:25533347).[UniProtKB/Swiss-Prot Function]