

Product datasheet for MR225570L4V

OriGene Technologies, Inc.

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Pias2 (NM_001164167) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Pias2 (NM_001164167) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Pias2

Synonyms: 6330408K17Rik; Al462206; ARIP3; AU018068; Dib; Miz1; PIASxalpha; PIASxb; PIASxbeta; SIZ2

Mammalian Cell

Selection:

Puromycin

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

Tag: mGFP

ACCN: NM_001164167

ORF Size: 1740 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(MR225570).

Sequence:

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: <u>NM 001164167.1</u>, <u>NP 001157639.1</u>

RefSeq Size: 4942 bp
RefSeq ORF: 1743 bp
Locus ID: 17344
UniProt ID: Q8C5D8

Cytogenetics: 18 E3







Gene Summary:

Functions as an E3-type small ubiquitin-like modifier (SUMO) ligase, stabilizing the interaction between UBE2I and the substrate, and as a SUMO-tethering factor. Plays a crucial role as a transcriptional coregulation in various cellular pathways, including the STAT pathway, the p53 pathway and the steroid hormone signaling pathway. The effects of this transcriptional coregulation, transactivation or silencing may vary depending upon the biological context and PIAS2 isoform studied. However, it seems to be mostly involved in gene silencing. Binds to sumoylated ELK1 and enhances its transcriptional activity by preventing recruitment of HDAC2 by ELK1, thus reversing SUMO-mediated repression of ELK1 transactivation activity. Isoform PIASx-beta, but not isoform PIASx-alpha, promotes MDM2 sumoylation. Isoform PIASx-alpha promotes PARK7 sumoylation. Isoform PIASx-beta promotes NCOA2 sumoylation more efficiently than isoform PIASx-alpha (By similarity). Sumoylates PML at'Lys-65' and 'Lys-160' (By similarity). [UniProtKB/Swiss-Prot Function]