

OriGene Technologies, Inc.

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Product datasheet for MR209412L4V

Pias2 (NM_001164168) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Pias2 (NM_001164168) 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_001164168
ORF Size:	1839 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR209412).
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. <u>More info</u>
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 001164168.1, NP 001157640.1</u>
RefSeq Size:	4984 bp
RefSeq ORF:	1845 bp
Locus ID:	17344
UniProt ID:	<u>Q8C5D8</u>
Cytogenetics:	18 E3



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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]

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