

Product datasheet for **MG208919**

Pias2 (BC034711) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pias2 (BC034711) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pias2
Synonyms:	Dib, ARIP3, PIASxbeta, SIZ2, PIASxb, 4930520E11Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208919 representing BC034711
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTTTCTAGTTTTAGGGTTTCTGAGTTACAAGTGTACTGGGCTTTGCTGGACGGAATAAAAGTGGGC
 GCAAGCATGACCTCCTGATGAGGGCGTTGCATTTATTGAAGAGTGGCTGCAGCCCTGCGGTTTCAGATTAA
 AATTCGAGAATTATATAGACGCCGATACCCACGGACACTTGAAGGACTTTGTGATCTTCCACAATCAAA
 TCATCGGTTTTAGCTTGGATGGTAGCTCATCACCCGTAGAACCCTGACTTGCCTGTGGTGGGATCCACT
 CGTTGCCCTTCGACTTCAATTACACCTCATTACCGTCATCTCCTGTTGGTTCTGTACTGTGCAAGACAC
 TAAGCCCACCTTTGAGATGCAGCAGCCGCTCCGCCCATCTCCTGTCCATCCTGATGTGCAGTAAAA
 AACCTGCCTTCTATGATGTCCTTGATGTTCTCATCAAGCCCACGAGTTAGTTCAAAGCAGTATTCAGC
 GGTTTCAAGAGAAGTTTTTATTTTTGCTTTGACACCTCAGCAAGTTAGAGAAATATGTATTTCAAGGGA
 CTTTTTCCGGGTGGCAGGAGAGACTACACAGTCCAAGTCCAGCTGCGACTTTGCTTGGCAGAGACCAGT
 TGCCTCAAGAAGATAACTATCCCAATAGTTTGTGTATAAAAAGTCAATGGGAAACTTTTCTTTGCCTG
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 AGTTAGTTGTCTTCAGCTGTGCCAAATCAGATTTCTATTTCTTGGGCATCTGAAATTGGAAAGAATTAC
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 TACAACAGTCTTCGAGTGTCTTGATGTGCCCTTTAGGAAAAATGAGGCTGACAATCCCGTGCCGTGCA
 GTGACTGTACACATCTGCAGTCTTTGATGCTGCCCTCTATCTTCAGATGAATGAGAAAAAGCCACCT
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 CTTGTTCACTGACTGTAGCCAGTGTGCAAGCAAGAAGAAGATAGATGTTATTGATCTAACAATAGAGAG
 CTCTTCTGATGAAGAGGAAGACCCTCCCGCCAAAAGGAAATGCATCTTTATGTCAGAAACACAAAGCAGT
 CCAACCAAGGGGTTCTCATGTATCAGCCATCTTCTGTAAGGGTGCCAGTGTGACTTCAGTTGATCCTG
 CTGCTATTCCACCTTCATTAACAGACTACTCAGTACCATTCCACCACACGCCAGTGTCAAGCATGTCATC
 AGATTTGCCAGGAGAACAAGAAGAAATGATATTAATAACGAAGTGCAGCTTGGAGCATCTTCTGATACT
 TGCAACAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG208919 representing BC034711
 Red=Cloning site Green=Tags(s)

MVSSFRVSELQVLLGFAGRNKSGRKHDLMLRALHLLKSGCSPAVQIKIRELYRRRYPRTEGLCDLSTIK
 SSVFSLDGSSSPVEPDLVAGIHSPLPSTSIPTSPSPVGSVLLQDTKPTFEMQQPSPIPPVHPDVQLK
 NLPFYDVLVLIKPTSLVQSSIQRFAQEKFIFALTPQQVREICISRDFLPGRRDYTVQVQLRLCLAETS
 CPQEDNYPNSLCIKVNGKLFPLPGYAPPKNGIEQKRPGRPLNITSLVRLSSAVPNQISISWASEIGKNY
 SMSVYLVRQLTSAMLLQRLKMKGIRNPDHSRALIKEKLTADPDSEIATTSLRVSLMCPLGKMRLTIPCRA
 VTCTHLQCFDAALYLQMNEKKPTWICPVCDKKAAYESLILDGLFMEILNDCSDVDEIKFQEDGSWCPMRP
 KKEAMKVTQPCTKVESSVFSKPCSVTVASDASKKKIDVIDLTISSSDEEEDPPAKRKCIFMSETQSS
 PTKGVLMYQPSSVRVPSVTSVDPAAIIPSLTDYSVPFHHTPVSSMSSDLPEQRNDINNEVQLGASSDT
 VQQ

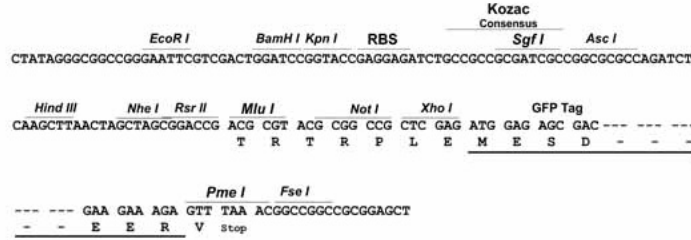
TRTRPLE - GFP Tag - V

Restriction Sites:

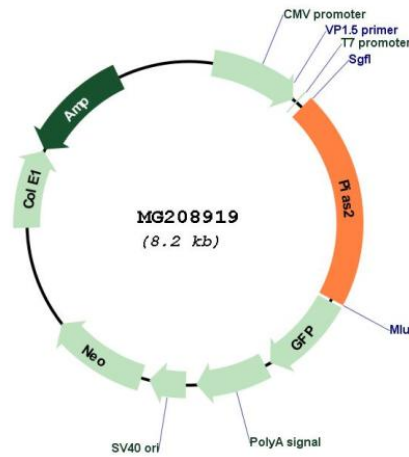
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: BC034711
 ORF Size: 1691 bp

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.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	BC034711 , AAH34711
RefSeq Size:	2092 bp
RefSeq ORF:	1691 bp
Locus ID:	17344
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]