

## Product datasheet for **MG209770**

### **Pias1 (NM\_019663) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pias1 (NM_019663) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pias1
Synonyms:	2900068C24Rik; Ddxbp1; GBP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG209770 representing NM\_019663  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGACAGTGCAGAACTAAAGCAAATGGTTATGAGCCTTAGAGTTTCTGAACTCCAAGTACTGTTGG  
 GCTACGCTGGGAGGAACAAGCACGGACGCAAAACGAACTTCTTACAAAAGCCCTGCATTTGTTAAAGGC  
 TGGCTGTAGTCTGCTGTACAAATGAAAATTAAGAACTCTACAGGAGCGGTTCCCTCAGAAAATTATG  
 ACGCCTGCGGACTTGTCTATCCCAACGTACATCAAGTCTATGCCTCCGACTCTTTCTCCATCCACCA  
 TTCCACAGCTCACTTATGATGGCCACCCTGCATCATCCCCTACTCCCTGTTTCTTTCTGGGACCCAA  
 ACATGAACTGGAATCCACATCTCACGTACGCTGCACCCAGTCCACCCGGACATAAAGCTGCAGAAG  
 CTACCATTTCTATGACCTGTTGGATGAAGTATCAAGCCACCAGTCTAGCTTCAGACAACAGCCAGCGCT  
 TTCGGAAACCTGTTTTGCATTTGCCTTGACCCACAACAGGTGCAGCAGATCAGCAGCTCCATGGATAT  
 TTCTGGGACCAAATGTGACTTCACAGTGCAGGTCCAATTAAGGTTTTGTTTATCAGAAACCAGTTGCCA  
 CAAGAAGATCACTTCCCACCAACCTTTGTGTAAGTGAATACAAAACCTTGCAGCCTTCCAGGTTACC  
 TTCCACCTACTAAAAACGGTGTGGAACCAAGCGACCTAGCCGACCAATTAATATCACCTCACTTGTCCG  
 ATTGTCCACGACAGTACCAAATACCATTGTTGTTTCTTGGACTGCAGAAATGGAAGAACCTATTCCATG  
 GCAGTATATCTTGTAAAACAGTTGCTCTCAACAGTTCTTCTTCCAGAGTTACGAGCAAAGGGAATAAGGA  
 ATCCGGATCATTCTAGAGCTTTAATTAAGAGAAGTAACTGCAGATCCAGATAGTGAGATAGCTACTAC  
 CAGCCTACGGGTTTCGCTGCTGTGCCACTTGGGAAAATGCGACTGACAAATCCCCTGTCCGGCAGTTACC  
 TGCTCCCACCTTCAGTGTGTTGATGCAACTCTTACATTCAAATGAATGAGAAAAACCAACATGGGTTT  
 GTCTGTCTGTGATAAGAAGGCCCATATGAACACCTTATTATTGACGGTTGTTTATGGAATTTCTAAA  
 GTACTGCACAGACTGTGACGAGATACAGTTTAAGGAGGATGGCTCGTGGGCTCCAATGAGGTCAAAGAAG  
 GAGGTTCAAGAAGTCACTGCCTCTACAATGGAGTTGATGGTTGCTTGAGCTCCACATTGGAGCATCAGG  
 TAGCGTCCACAACCAGTCTCAATAAAAAACAAGAAAGTCGAGGTCATTGACCTAACCATTTGACAGCTC  
 GTCAGATGAAGAGGAGGAAGAACCCCTGCCAAGAGGACCTGTCTTCCCTGTCTCTACGTCACTACTA  
 AGTAATAAAGGCATTTTAAGTCTTCTCATCAAGCCTCGCTGTGTCGCCACCCCAAGCCTTCTGCTG  
 TAGATAAAGCTACATCAACACCTCCCTCATCCAGGACTACAGGCACCCCTTCCACATGACGCTATGCC  
 TTATGACTTACAAGGATTAGATTTCTTTCTTTCTTATCAGGAGACAATCAGCATTACAACACCTCCCTG  
 CTAGCCGACGCTGCAGCGCGGCTCAGATGACCAGGACCTCCTGCACTCCTCCCGTTTTTCCCGTATA  
 CCTCTCGCAGATGTTTCTCGACCAGCTAAGTGCAGGAGGAGCAGCATCTCTGCCAGCCACAACCGGAAG  
 CAGTAGCGGCAGCAACAGCAGCCTTGTGCTTCCAACAGTCTGAGAGAGAGCCATGGCCATGGTGTGGCC  
 AGCAGGAGCAGCGCAGACACAGCGTCCATCTTTGGCATCATACCAGACATTATCTCATTGGAC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG209770 representing NM\_019663  
 Red=Cloning site Green=Tags(s)

MADSAELKQMVMSLRVSELQVLLGYAGRKNHGRKHELLTKALHLLKAGCSPAVQMKIKELYRRRFPQKIM  
 TPADLSIPNVHSSPMPPTLSPSTIPQLTYDGHPASSPLLPVSLLGPKHELELPHLTSALHPVHPDIKQK  
 LPFYDLLDELIKPTSLASDNSQRFRETCFAFALTPQQVQQISSMDISGTKCDFTVQVQLRFCLSETSCP  
 QEDHFPPNLVKNVTKPCSLPGYLPPTKNGVEPKRPSRPINITSLVRLSTTVPNTIVVSWTAEIGRTYSM  
 AVYLVKQLSSTVLLQRLRAKGIRNPDHSRALIKEKLTADPDSEIATTSLRVSLCPLGKMRLTIPCRALT  
 CSHLQCFDATLYIQMNEKKPTWVCPVCDKKAPEYHLIIDGLFMEILKYCTDCDEIQFKEDGSWAPMRSKK  
 EVQEVTASYNGVDGCLSSTLEHQVASHNQSSNKNKVEVIDLTISSSDEEEEPKARTCPSLSPTSPL  
 SNKGILSLPHQASPVSRTPSLPAVDTSYINTSLIQDYRHPFHMTMPYDLQGLDFPFLSGDNQHYNTSL  
 LAAAAAVSDDQDLLHSSRFFPYTSSQMFLDQLSAGGSTSLPATNGSSSGSNSSLVSSNSLRESHGHVGA  
 SRSSADTASIFGIIPDIISLD

**TRTRPLE** – GFP Tag – V



<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_019663.3</a>
<b>RefSeq Size:</b>	3856 bp
<b>RefSeq ORF:</b>	1956 bp
<b>Locus ID:</b>	56469
<b>UniProt ID:</b>	<a href="#">O88907</a>
<b>Cytogenetics:</b>	9 B
<b>Gene Summary:</b>	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. In vitro, binds A/T-rich DNA (By similarity). The effects of this transcriptional coregulation, transactivation or silencing, may vary depending upon the biological context. Sumoylates PML (at'Lys-65' and 'Lys-160') and PML-RAR and promotes their ubiquitin-mediated degradation. PIAS1-mediated sumoylation of PML promotes its interaction with CSNK2A1/CK2 which in turn promotes PML phosphorylation and degradation. Enhances the sumoylation of MTA1 and may participate in its paralog-selective sumoylation. Plays a dynamic role in adipogenesis by promoting the SUMOylation and degradation of CEBPB (PubMed:24061474).[UniProtKB/Swiss-Prot Function]