

## Product datasheet for **MC202291**

### **Pias1 (NM\_019663) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pias1 (NM_019663) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pias1
Synonyms:	2900068C24Rik; Ddxbp1; GBP
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >BC051417 sequence for NM\_019663  
 GCAAGATGGCGGACAGTGCAGAACTAAAGCAAATGGTTATGAGCCTTAGAGTTTCTGAACTCCAAGTACT  
 GTTGGGCTACGCTGGGAGGAACAAGCACGGACGCAAAACGAAGTCTTACAAAAGCCCTGCATTGTGTA  
 AAGGCTGGCTGTAGTCTGTGTACAAATGAAAATTAAGAACTCTACAGGAGGCGGTTCCCTCAGAAAA  
 TTATGACGCCTGCGGACTGTCTATCCCCAACGTACATTCAAGTCCTATGCCTCCGACTCTTTCTCCATC  
 CACCATCCACAGCTCACTTATGATGGCCACCCTGCATCATCCCCACTACTCCCTGTTTCTTTCTGGGA  
 CCCAAACATGAACTGGAATCCACATCTCACGTGACGCTGCACCCAGTCCACCCGGACATAAAGCTGC  
 AGAAGCTACCATTCTATGACCTGTTGGATGAACTGATCAAGCCACCAGTCTAGCTTCAGACAACAGCCA  
 GCGCTTTCGGGAAACCTGTTTTGCATTTGCCTTGACACCACAACAGGTGCAGCAGATCAGCAGCTCCATG  
 GATATTTCTGGGACCAAATGTGACTTCACAGTGCAGGTCCAATTAAGGTTTTGTTTATCAGAAAACAGTT  
 GTCCACAAGAAGTCACTTCCCACCAACCTTTGTGTAAGTGAATACAAAACCTTGCAGCCTTCCAGG  
 TTACCTTCCACCTACTAAAACGGTGTGGAACCAAGCGACTAGCCGACCAATTAATATCACCTCACTT  
 GTCGATGTCCACGACAGTACCAATACCATTGTTGTTCTTGGACTGCAGAAATTGGAAGAACCTATT  
 CCATGGCAGTATATCTTGTAAAACAGTTGCTCAACAGTTCTTCTTCCAGAGTTACGAGCAAAGGGAAT  
 AAGGAATCCGGATCATTCTAGAGCTTTAATTAAGAGAAGTAACTGCAGATCCAGATAGTGAGATAGCT  
 ACTACCAGCCTACGGGTTTCGCTGCTGTGCCACTTGGGAAAATGCGACTGACAATCCCCTGTCCGGCAC  
 TTACCTGCTCCCACCTTCAGTGTGTTGATGCAACTCTTACATTCAAATGAATGAGAAAAACCAACATG  
 GTTTTGCTGTGTGTGATAAGAAGGCCCATATGAACACCTTATTATTGACGGGTTGTTTATGAAATT  
 CTAAGTACTGCACAGACTGTGACGAGATACAGTTAAGGAGGATGGCTCGTGGGCTCCAATGAGGTCAA  
 AGAAGGAGGTTCAAGAAGTCACTGCCTCCTACAATGGAGTTGATGGTTGCTTGAGCTCCACATTGGAGCA  
 TCAGGTAGCGTCCCACAACCAAGTCCCAATAAAAACAAGAAAGTCGAGGTGATTGACCTAACATTGAC  
 AGCTCGTCAGATGAAGAGGAGGAAGAACCCCTGCCAAGAGGACCTGCTTCCCTGTCTCCTACGTAC  
 CACTAAGTAATAAAGGCATTTAAGTCTTCCCTCATCAAGCCTCGCTGTGTCCTCCGACCCCAAGCCTTCC  
 TGCTGTAGATAACAAGCTACATCAACACCTCCCTCATCCAGGACTACAGGCACCCCTTCCACATGACGCCT  
 ATGCCCTATGACTTACAAGGATTAGATTTCTTTCTTTCTTATCAGGAGACAATCAGCATTACAACACCT  
 CCCTGCTAGCCGACGCTGCAGCGCGGTCTCAGATGACCAGGACCTCCTGCACTCCTCCCGGTTTTTCCC  
 GTATACCTCCTCGCAGATGTTTCTCGACCAGCTAAGTGCAGGAGGGAGCACATCTCTGCCAGCCACCAAC  
 GGAAGCAGTAGCGGCAGCAACAGCAGCCTTGTGTCTTCCAACAGTCTGAGAGAGAGCCATGGCCATGGTG  
 TGGCCAGCAGGAGCAGCGCAGACACAGCGTCCATCTTTGGCATCATACCAGACATTATCTCATTGGACTG  
 ACGCTCTACCCCTGCTGCTCCCACCCATCCCAGATTAATGACTTGGCAGAAGAGAAGTCTATGCTCTG  
 TTTTACCTTATCCTGTTAGAAAAGTATACAAGCGTGGTTTTTTTTTTTCTTTTTTTAGGGAAAAAAA  
 ATTAAGAAAGAAATGTACAGAGAACAAAACATAATTTTTCAGTTTTACTTTTGTATATAAATCTAAGACTGCC  
 TGCTGTATAAAACACTTGTTTAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAA

- Restriction Sites:** RsrII-NotI
- ACCN:** NM\_019663
- Insert Size:** 1956 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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:**

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:** [BC051417](#), [AAH51417](#)

**RefSeq Size:** 2235 bp

**RefSeq ORF:** 1956 bp

**Locus ID:** 56469

**UniProt ID:** [O88907](#)

**Cytogenetics:** 9 B

**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. 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]