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Product datasheet for MR209770

Pias1 (NM_019663) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pias1 (NM_019663) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pias1
Synonyms:	2900068C24Rik; Ddxbp1; GBP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR209770 representing NM_019663
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGACAGTGCGGAACTAAAGCAAATGGTTATGAGCCTTAGAGTTTCTGAACTCCAAGTACTGTTGG
GCTACGCTGGGAGGAACAAGCACGGACGCAAACACGAACTTCTTACAAAAGCCCTGCATTTGTTAAAGGC
TGGCTGTAGTCCTGCTGTACAAATGAAAATTAAAGAACTCTACAGGAGGCGGTTCCCTCAGAAAATTATG
ACGCCTGCGGACTTGTCTATCCCCAACGTACATTCAAGTCCTATGCCTCCGACTCTTTCTCCATCCACCA
TTCCACAGCTCACTTATGATGGCCACCCTGCATCATCCCCACTACTCCCTGTTTCTCTTCTGGGACCCAA
ACATGAACTGGAACTCCCACATCTCACGTCAGCGCTGCACCCAGTCCACCCGGACATAAAGCTGCAGAAG
CTACCATTCTATGACCTGTTGGATGAACTGATCAAGCCCACCAGTCTAGCTTCAGACAACAGCCAGCGCT
TTCGGGAAACCTGTTTTGCATTTGCCTTGACACCACAACAGGTGCAGCAGATCAGCAGCTCCATGGATAT
TTCTGGGACCAAATGTGACTTCACAGTGCAGGTCCAATTAAGGTTTTGTTTATCAGAAACCAGTTGTCCA
CAAGAAGATCACTTCCCACCCAACCTTTGTGTAAAAGTGAATACAAAACCTTGCAGCCTTCCAGGTTACC
TTCCACCTACTAAAAACGGTGTGGAACCAAAGCGACCTAGCCGACCAATTAATATCACCTCACTTGTCCG
ATTGTCCACGACAGTACCAAATACCATTGTTGTTTCTTGGACTGCAGAAATTGGAAGAACCTATTCCATG
GCAGTATATCTTGTAAAACAGTTGTCCTCAACAGTTCTTCTTCAGAGGTTACGAGCAAAGGGAATAAGGA
ATCCGGATCATTCTAGAGCTTTAATTAAAGAGAAGTTAACTGCAGATCCAGATAGTGAGATAGCTACTAC
CAGCCTACGGGTTTCGCTGCTGTGTCCACTTGGGAAAATGCGACTGACAATCCCCTGTCGGGCACTTACC
TGCTCCCACCTTCAGTGTTTTGATGCAACTCTTTACATTCAAATGAATGAGAAAAAACCAACATGGGTTT
GTCCTGTCTGTGATAAGAAGGCCCCATATGAACACCTTATTATTGACGGGTTGTTTATGGAAATTCTAAA
GTACTGCACAGACTGTGACGAGATACAGTTTAAGGAGGATGGCTCGTGGGCTCCAATGAGGTCAAAGAAG
GAGGTTCAAGAAGTCACTGCCTCCTACAATGGAGTTGATGGTTGCTTGAGCTCCACATTGGAGCATCAGG
TAGCGTCCCACAACCAGTCCTCAAATAAAAACAAGAAAGTCGAGGTCATTGACCTAACCATTGACAGCTC
GTCAGATGAAGAGGAGGAAGAACCCCCTGCCAAGAGGACCTGTCCTTCCCTGTCTCCTACGTCACCACTA
AGTAATAAAGGCATTTTAAGTCTTCCTCATCAAGCCTCGCCTGTGTCCCGCACCCCAAGCCTTCCTGCTG
TAGATACAAGCTACATCAACACCTCCCTCATCCAGGACTACAGGCACCCCTTCCACATGACGCCTATGCC
TTATGACTTACAAGGATTAGATTTCTTTCCTTTCTTATCAGGAGACAATCAGCATTACAACACCTCCCTG
CTAGCCGCAGCTGCAGCGGCGGTCTCAGATGACCAGGACCTCCTGCACTCCTCCCGGTTTTTCCCGTATA
CCTCCTCGCAGATGTTTCTCGACCAGCTAAGTGCAGGAGGGAGCACATCTCTGCCAGCCACCAACGGAAG
CAGTAGCGGCAGCAACAGCAGCCTTGTGTCTTCCAACAGTCTGAGAGAGAGCCATGGCCATGGTGTGGCC
AGCAGGAGCAGCGCAGACACAGCGTCCATCTTTGGCATCATACCAGACATTATCTCATTGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

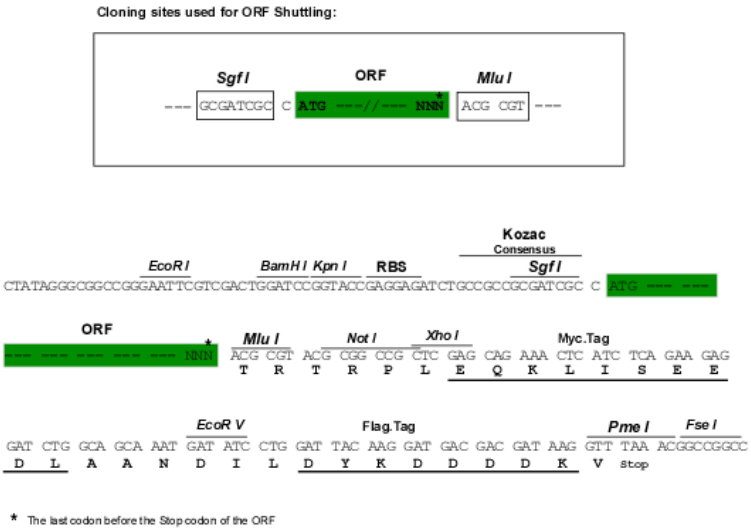
>MR209770 representing NM_019663
Red=Cloning site Green=Tags(s)

MADSAELKQMVMSLRVSELQVLLGYAGRNKHGRKHELLTKALHLLKAGCSPAVQMKIKELYRRRFPQKIM
TPADLSIPNVHSSPMPPTLSPSTIPQLTYDGHPASSPLLPVSLLGPKHELELPHLTSALHPVHPDIKLQK
LPFYDLLDELIKPTSLASDNSQRFRETCFAFALTPQQVQQISSSMDISGTKCDFTVQVQLRFCLSETSCP
QEDHFPPNLCVKVNTKPCSLPGYLPPTKNGVEPKRPSRPINITSLVRLSTTVPNTIVVSWTAEIGRTYSM
AVYLVKQLSSTVLLQRLRAKGIRNPDHSRALIKEKLTADPDSEIATTSLRVSLLCPLGKMRLTIPCRALT
CSHLQCFDATLYIQMNEKKPTWVCPVCDKKAPYEHLIIDGLFMEILKYCTDCDEIQFKEDGSWAPMRSKK
EVQEVTASYNGVDGCLSSTLEHQVASHNQSSNKNKKVEVIDLTIDSSSDEEEEEPPAKRTCPSLSPTSPL
SNKGILSLPHQASPVSRTPSLPAVDTSYINTSLIQDYRHPFHMTPMPYDLQGLDFFPFLSGDNQHYNTSL
LAAAAAAVSDDQDLLHSSRFFPYTSSQMFLDQLSAGGSTSLPATNGSSSGSNSSLVSSNSLRESHGHGVA
SRSSADTASIFGIIPDIISLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_019663

ORF Size: 1953 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: 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: NM_019663.3

RefSeq Size: 3856 bp

RefSeq ORF: 1956 bp

Locus ID: 56469

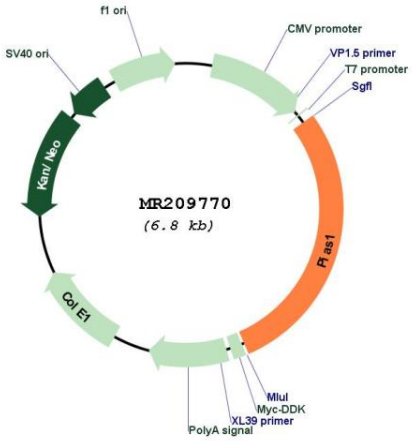
UniProt ID: O88907

Cytogenetics: 9 B

MW: 72.1 kDa

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]

Product images:



Circular map for MR209770