

Product datasheet for **RC212659**

PIAS2 (NM_004671) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIAS2 (NM_004671) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PIAS2
Synonyms:	ARIP3; DIP; MIZ1; PIASX; SIZ2; ZMIZ4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC212659 representing NM_004671
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGATTTTCAAGAGTTGAGGAATATGGTTTCTAGTTTTAGGTTTTCTGAACACTACAAGTATTACTAG
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 CGAGTTTAGTTCAAAGCAGTATTCAGCGATTTCAAGAGAAGTTTTTTATTTTGGCTTGGACCTCAACA
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 CCCCAGTACTGTCTCTATGTTTTGGATAGTCTCACCTCACCTTAACAGCAAGCAGTACGTCTGTCA
 CCACCACAGCTCCCATGAAAGCAGTACTCATGTTAGTTCATCCAGCAGCAGGAGTGAGACAGGGGTCAT
 AACCAGCAGTGGAAAGTAACATTCCTGACATCATCTCATTGGAC

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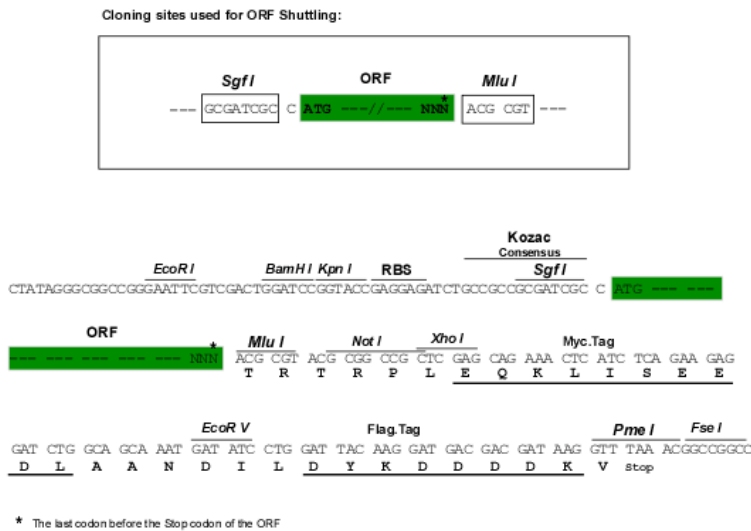
Protein Sequence:

>RC212659 representing NM_004671
 Red=Cloning site Green=Tags(s)

MADFEELRNMVSSFRVSELQVLLGFAGRNKSGRKHDLMLRALHLLKSGCSPAVQIKIRELYRRYRPTLE
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 LRLCLAETSCPQEDNYPNSLCIKVNGKLFPLPGYAPPPKNGIEQKRPGRPLNITSLVRLSSAVPNQISIS
 WASEIGKNYSMSVYLVRQLTSAMLLQRLKMKGIRNPDHSRALIKEKLTADPDSEIATTSLRVSLMCPGK
 MRLTIPCRAVTCTHLQCFDAALYLQMNKKTWICPVCDKKAAYESLILDGLFMEILNDCSDVDEIKFQE
 DGSWCPMRPKKEAMKVSSQPCTKIESSSVL SKPCSVTVASEASKKVDVIDLTISSSSDEEEDPPAKRKC
 IFMSETQSSTPKVLMYQPSSVRVPSVTSVDPAAIPPSLTDYSVPFHHTPISSMSSDPLGLDFLSLIPVD
 PQYCPMFLDSLTSPLTASSTSVTTSSHESSTHVSSSSSRSETGVITSSGSNIPDIISLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6122_d03.zip
 Restriction Sites: SgfI-MluI
 Cloning Scheme:



ACCN: NM_004671

ORF Size: 1863 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.

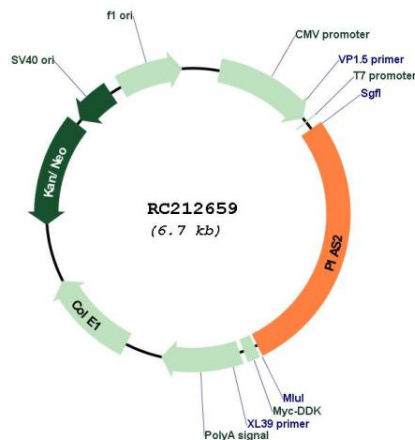
RefSeq: [NM_004671.5](#)

RefSeq Size: 2360 bp

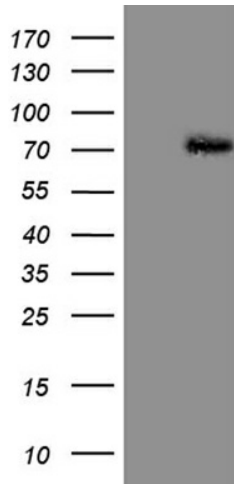
RefSeq ORF: 1866 bp

Locus ID:	9063
UniProt ID:	O75928
Cytogenetics:	18q21.1
Domains:	SAP, zf-MIZ
Protein Families:	Stem cell - Pluripotency, Stem cell relevant signaling - JAK/STAT signaling pathway, Transcription Factors
Protein Pathways:	Jak-STAT signaling pathway, Pathways in cancer, Small cell lung cancer, Ubiquitin mediated proteolysis
MW:	68.1 kDa
Gene Summary:	This gene encodes a member of the protein inhibitor of activated STAT family, which function as SUMO E3 ligases and play important roles in many cellular processes by mediating the sumoylation of target proteins. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. Isoforms of the encoded protein enhance the sumoylation of specific target proteins including the p53 tumor suppressor protein, c-Jun, and the androgen receptor. A pseudogene of this gene is located on the short arm of chromosome 4. The symbol MIZ1 has also been associated with ZBTB17 which is a different gene located on chromosome 1. [provided by RefSeq, Aug 2017]

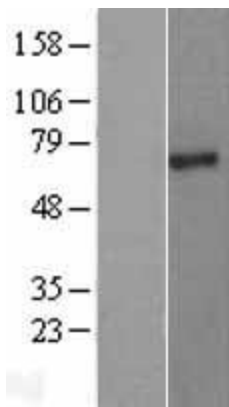
Product images:



Circular map for RC212659



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PIAS2 (Cat# RC212659, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PIAS2 (Cat# [TA808334])(1:500). Positive lysates [LY401487] (100ug) and [LC401487] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401487]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212659 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).