

Product datasheet for **RG219594**

PIAS1 (NM_016166) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIAS1 (NM_016166) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PIAS1
Synonyms:	DDXBP1; GBP; GU/RH-II; ZMIZ3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219594 representing NM_016166
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGACAGTGCAGAACTAAAGCAAATGGTTATGAGCCTTAGAGTTTCTGAACTCCAAGTACTGTTGG
 GCTACGCCGGGAGAAACAAGCACGGACGCAAAACGAACTTCTCACAAAAGCCCTGCATTTGCTAAAGGC
 TGGCTGTAGTCCCTGTGCAAAATGAAAATTAAGGAACTCTATAGGCGCGGTTCCACAGAAAATCATG
 ACGCCTGCAGACTTGCCATCCCAACGTACATCAAGTCTATGCCAGCAACTTTGTCTCCATCTACCA
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 TTACGACTTACAAGGATTAGATTTCTTTCTTTCTTATCAGGAGACAATCAGCATTACAACACCTCCTTG
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 CAGTAGTGGCAGTAAACAGCAGCCTGGTTTTCTTCAACAGCCTAAGGGAAAGCCATAGCCACACCGTCA
 AACAGGAGCAGCAGGACACGGCATCCATCTTTGGCATCATACCAGACATTATTTTCATTGGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG219594 representing NM_016166
 Red=Cloning site Green=Tags(s)

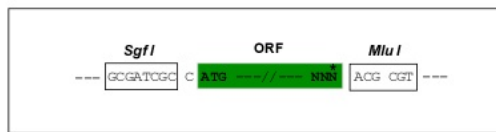
MADSAELKQMVMSLRVSELQVLLGYAGRKNKHGRKHELLTKALHLLKAGCSPAVQMKIKELYRRRFPQKIM
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 LAAAAAVSDDQDLLHSSRFFPYTSSQMFLDQLSAGGSTSLPTTNGSSSGSNSLVSNSLRESHSHTVT
 NRSSTDTASIFGIIPDIISLD

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



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                                         Kozac
                                         Consensus
                                         Sgf I
EcoR I      BamH I Kpn I      RBS      Sgf I      Asc I
CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

Hind III   Nhe I   Rsr II   Mlu I           Not I   Xho I           GFP Tag
CAAGCTTAAGTACTAGCTAGCGGACCG  ACG CGT  ACG CGG  CCG CTC GAG  ATG GAG AGC GAC -----
                               T  R  T  R  P  L  E  M  E  S  D  - - - -
                                   Pme I   Fse I
----- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
- - - E  E  R  V  Stop
    
```

ACCN: NM_016166

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_016166.3](#)

RefSeq Size: 2309 bp

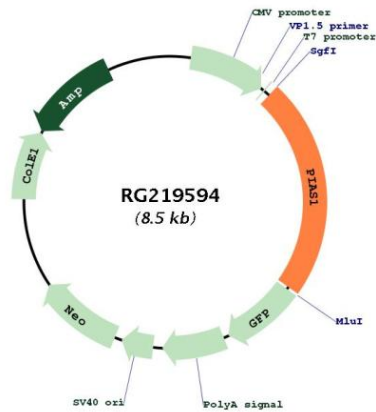
RefSeq ORF: 1956 bp

Locus ID: 8554

UniProt ID: [O75925](#)

Cytogenetics:	15q23
Domains:	SAP, zf-MIZ
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Jak-STAT signaling pathway, Pathways in cancer, Small cell lung cancer, Ubiquitin mediated proteolysis
Gene Summary:	This gene encodes a member of the protein inhibitor of activated STAT (PIAS) family. PIAS proteins function as SUMO E3 ligases and play important roles in many cellular processes by mediating the sumoylation of target proteins. This protein plays a central role as a transcriptional coregulator of numerous cellular pathways including the STAT1 and nuclear factor kappaB pathways. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

Product images:



Circular map for RG219594