

Product datasheet for **RG205204**

PJA2 (NM_014819) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PJA2 (NM_014819) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PJA2
Synonyms:	Neurodap1; RNF131
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG205204 representing NM_014819
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCACAGTACACTGAAAAGGAGCCAGCAGCAATGGACCAAGAATCTGGTAAGGCTGTCTGCCCAAAC
 CAGCAGGAGGGTATCAGACAATTACAGGCAGGAGATATGGAAGAAGACATGCTTATGTCAGTTTTAAACC
 ATGTATGACCAGACATGAAAAGCTTAGTTCGGGCTGGTATGACTATGAAGTGTGAACTAGATGAT
 GTTCCAAAGGAAAATTCCTCAGGTTCCAGTCTTTGGATCAAGTTGATTCTTCTTTACCAAGTGAACCTA
 TATTTGAAAAAGTGAACAGAAAATCCCACTTGTGGTTCAGCATTGAATCAAACCACTGAGAGCAGTCA
 ATCCTTTGTTGCAGTACATCACAGTGAGGAAGGCAGGGATACCTTAGGAAGCAGTACAAAATCTTCATAAT
 CACTCTGAGGGAGAGTATATTCCAGGAGCTGTAGTGCTCAAGTGTCCAAAATGGAATTGCATTGGTTC
 ATACAGACTCTTATGATCCAGATGGCAAACATGGAGAAGATAATGACCATCTTCAACTTTCTGCAGAAGT
 CGTGGAAGGTAGTAGATACCAGGAATCATTAGGCAATACAGTATTTGAGTTGGAAAACAGAGAGGCAGAG
 GCATACACTGGTCTTTCACCACCAGTCCCTCATTAACTGTGAAGTAAGAGATGAGTTTGAAGAGTTAG
 ATTCTGTACCATTAGTAAAAGTTCTGCTGGTGATACTGAGTTTGTCCATCAGAATAGCCAGGAAATTC
 GAGGCTCTCTCAAGATGAAATGGTTAGTACGAAACAACAAAATAACTAGCCAGGAAAGACAGACAGAA
 CATTCACTGAAGATGCAGCCTGTGGTCCAGGGCATAATTTGTAGTGAACGAAATACCAATGATAGGGAAA
 AGAACCATGGAAGTTCTCCTGAACAGGTAGTGAGGCCAAAAGTTAGAAAAGTATAAGTTCAAGCCAGGT
 GGACCAAGAAACAGGTTTAAATAGGCATGAGGCCAAAACAAGAAGTTTCAAAGATGGAGAGAGGCTTTG
 GAAGTTGAGGAAAGTGGCTCAGATGACCTCTTAATAAAAATGTGAAGAATATGATGGAGAGCATGACTGTA
 TGTTCTGGATCCACCATACTCAAGAGTTATTACACAAAAGGAAACAGAAAATAACCAAAATGACATCAGA
 AAGTGGAGCCACAGCGGGAAGGCAAGAAGTGGATAACACCTTTTGAATGGCTGTGGAGATTATTACCAA
 CTCTATGACAAAAGATGAAGATAGTTCTGAATGCAGTGTGGGAAATGGTCTGCTTCTTGCCTCATCGAT
 TTTCTGTTACAGAAAAGATCAATCCTCAAGTGTGAAAGCTGGGAGACTCTGCCAGGAAAAGATGAGAA
 TGAACCTGAGCTACAAAGTATAGCAGTGGCCCTGAAGAAGAAAACCAAGAATTATCTTTCAGGAAGGG
 GAACAGACATCCTTGAAGAGGGAGAAATTCCTTGGTTACAGTACAATGAAGTCAATGAAAGCAGCAGTG
 ATGAGGGAAATGAACCTGCCAATGAATTTGCACAGCCAGCTTTCATGTTGGATGGTAACAATAACCTGGA
 GGATGACTCCAGTGTGAGTGAAGACTTAGATGTGGATTGGAGCATATTTGATGGCTTTCAGATGGACTA
 GGAGTTGCTGAAGCTATTTTCATATGTGGATCCTCAGTTCTTACATACATGGCACTAGAAGAACGCTTAG
 CCCAGGCTATGGAGACTGCTCTGGCCATTTAGAGTCTTTCAGTGGATGTTGAGGTGGCAATCCACC
 AGCTAGTAAGGAAAGCATTGATGGTCTTCCAGAGACCCTTGTCTTGAAGATCACACTGCTATTGGTCAG
 GAACAATGCTGTCCAATCTGTTGCAGTGAATATTAAGGATGATATAGCAACAGAGTTGCCCTGTCACC
 ATTTCTTTCACAAACCTTGTGTCTCAATTTGGCTACAAAAGTCCGGGAACATGCCCTGTGTGCCCGCTCA
 TTTCCACCTGCGGTTATTGAAGCATCTGCAGCTCCTTCTCTGAGCCTGATCCTGATGCCCCACCTTCG
 AATGACAGTATTGCAGAAGCACCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG205204 representing NM_014819
 Red=Cloning site Green=Tags(s)

```
MSQYTEKEPAAMDQESGKAVWPKPAGGYQTITGRRYGRRHAYVSFKPCMTRHERSLGRAGDDYEVLDD
VPKENS SSSPLDQVDSSLPSEPIFEKSETEIPTCGSALNQTTESSQSFVAVHHSEGRDTLGSSTNLHN
HSEGEYIPGACSSAVQNGIALVHTDSYDPDGKHGEDNDHLQLSAEVVEGSRYSQESLGNVFELENREAE
AYTGLSPPVPSFNCEVRDEFEELDSVPLVKSSAGDTEFVHQNSQEIQRSSQDEMSTKQQNNTSQRQTE
HSPEDAACGPGHICSERNTNDREKNHGSSPEQVVRPKVRKLISSSQVDQETGFNRHEAKQRSVQRWREAL
EVEESGSDLLIKCEEYDGEHDCMFLDPPYSRVIITQRE TENNQMTSESGATAGRQEVNDFWNGCGDYQ
LYDKDEDSSECS DGEWSASLPHRFSGTEKDQSSSDES WETLPGKDENEPELQSDSSGPEEENQELSLQEG
EQTSLEEGEIPWLQYNEVNESSSDEGNEPANEF AQP AFMLDGNNNLEDDSSVSEDLDVDWSIFDGFADGL
GVAE AISYVDPQFLTYMALEERLAQAMETALAHLESLAVDVEVANPPASKESIDGLPETLVLEDHTAIGQ
EQCCPICSEYIKDDIATELPCHHFFHKPCVSIWLQKSGTCPVCRRHFPFAVIEASAAPSSEPDPDAPPS
NDSIAEAP
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014819

ORF Size: 2124 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_014819.3](#)

RefSeq Size: 4789 bp

RefSeq ORF: 2127 bp

Locus ID: 9867

UniProt ID: [O43164](#)

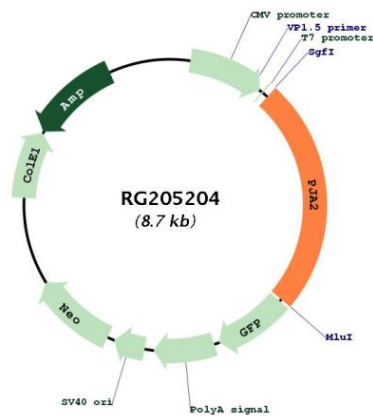
Cytogenetics: 5q21.3

Domains: RING

Protein Families: Druggable Genome

Gene Summary: Has E2-dependent E3 ubiquitin-protein ligase activity. Responsible for ubiquitination of cAMP-dependent protein kinase type I and type II-alpha/beta regulatory subunits and for targeting them for proteasomal degradation. Essential for PKA-mediated long-term memory processes. Through the ubiquitination of MFHAS1, positively regulates the TLR2 signaling pathway that leads to the activation of the downstream p38 and JNK MAP kinases and promotes the polarization of macrophages toward the pro-inflammatory M1 phenotype (PubMed:28471450).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG205204