

Product datasheet for **RG239962**

RPB2 (POLR2B) (NM_001303268) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RPB2 (POLR2B) (NM_001303268) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	POLR2B
Synonyms:	hRPB140; POL2RB; RPB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG239962 representing NM_001303268. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGCTGGATTGTAATCAGCCACGATATTTGCTGAAGTTTGAACAAATTTATCTTTCCAAGCCTACCCAT
TGGGAAAGAGATGGTGCTCCTTCACCAATGATGCCCAATGAAGCTAGATTAAGGAATCTCACGATTCT
GCTCCGCTTTATGTTGATATAACAAAAACAGTCATTAAGAAGGTGAAGAACAATTCAGACTCAGCAT
CAGAAAATTTTATAGGAAAAATCCAATTATGTTGCGGTCAACTACTGCCTTTTGAATGGCTTGACA
GATCGTGATCTTGTGAGTTAAATGAATGCCCTTTGGATCCTGGTGGCTATTTTCATTATTAATGGATCA
GAAAAGGTTCTGATTGCCAAGAGAAAAATGGCAACAAACACAGTTTATGTGTTTGCCAAAAGGATTCT
AAATATGCCTACACAGGAGAGTGTAGATCATGTCTTGAGAATTCTTCCCGACCCACCAGTACTATATGG
GTTAGCATGCTGGCAAGAGGAGGACAGGGTGCCAGAAGAGTGCTATTGGTCAGCGCATTGTGGCAACT
CTACCATATCAAGCAAGAAGTTCCCATCATTATTGTGTTTCAGAGCATTAGGTTTTGTGTCGGACAGA
GATATTTTAGAACATATTTATGATTTTGAAGATCCAGAGATGATGGAAATGGTTAAACCTTCTCTC
GATGAAGCTTTTGTATCCAAGAACAGAATGTTGCACTAAATTTTCATTGGTTCAAGAGGAGCAAAGCCT
GGTGTACTAAAGAGAAAAGAATTAATATGCAAAGGAAGTTTACAAAAAGAAATGCTCCCTCATGTT
GGTGTCAAGTATTTTGTGAGACCAAAAAAGCCTATTTCTGGGATACATGGTTCATAGGTTACTTCTG
GCAGCTTTGGGTAGAAGAGAACTAGATGACAGAGATCACTATGGAAACAAGAGATTGGATCTTGCTGGG
CCGCTGCTTGCATTCTTATTTAGAGGTATGTTTAAAGAAATTTGCTTAAAGAAGTCCGATCTATGCACAG
AAATTTATTGATCGAGGAAAGGATTTTAACTTGGAGTTGGCAATTAACACCGGATCATATCTGATGGC
CTAAAATACTCTTTAGCTACTGAAAAGTGGGGTATCAAAAGAAAGCTCATCAAGCCAGAGCTGGAGTA
TCTCAGGTGTTAAACCGCTGACTTTTGCCTACTCTTTCTCACCTGCGTCGTTTAAATTCCTCCTATT
GGTAGAGACGGCAAGCTAGCAAACCAAGACAGTTGCATAATACGTTGTGGGGAATGGTGTGCTCCTGCC
GAGACCCAGAGGGCCATGCTGTAGGACTTGTGAAGAATTTAGCCTTGATGGCGTATATTTCAAGTTGGA
TCTCAACCATCTCAATTTCTGGAATTTTAGAAGAATGGAGTATGAAAAATTTAGAAGAAATTTCTCCT
GCAGCTATTGCTGATGCAACCAAGATTTTGTAAATGGCTGCTGGTTGGAATACATAAAGATCCCGAA
```



[View online >](#)

CAACTTATGAACACCCTAAGGAAATTGAGACGTCAGATGGACATCATTGTGTCTGAAGTTTCTATGATC
 AGAGATATTCGAGAGAGGGGAGATTCCGGATCTATACGGATGCAGGCCGATTTTGTAGACCCTTCTGATT
 GTGGAAAAACAAAAGCTACTTTTGAAGAAGAGGCATATTGACCAATTGAAAGAGAGAGAATAACAAC
 TATAGTTGGCAGGATCTTGTGGCCAGTGGGGTAGTGGAGTATATTGATACCCTGGAAGAAGAACAGTG
 ATGCTTGAATGACTCCAGATGATTTACAGGAGAAAGAAGTAGCTTATTGTTCCACATATACACTGT
 GAGATTCATCCCTCAATGATCCTTGGTGTCTGTGCATCTATTATCCCTTCTCTGATCATAACCAGTCC
 CCTAGAAACACATACCAGTCTGCTATGGGTAAGCAGGCATATGGGAGTTTACATCACCACATCCATGTT
 CGCATGGACACATTGGCCATGTTCTCTATTATCTCTAAAAGCCACTTGTGACTACACGGTCTATGGAA
 TATCTACGATTTAGAGAGCTGCCAGCAGGCATCAACTCAATTGTGGCCATTGCATCATACACTGGATAT
 AATCAGGAAGACTCTGTTATCATGAATCGTTACAGCTGTAGACCGCGGCTTCTTCAGGTCTGTTTTCTAT
 CGCTCATACAAGAACAGGAGTCTAAAAAGGATTTGATCAAGAAGAAGTTTTTGAGAAGCCTACACGT
 GAAACATGCCAGGGCATGAGGCATGCCATTTACGACAAGCTGGATGATGATGGTTTGTAGCTCCAGGG
 GTTCGTGATCAGGAGATGATGTTATTATAGGCAAAACAGTCACCTTGCCTGAAAATGAAGATGAATTG
 GAGAGCACAATAGACGCTATACCAAGAGAGACTGTAGCACTTTTCTCAGAACTAGCGAGACGGGCATT
 GTGGATCAGGTTATGGTAACTCTCAATCAGGAAGGATATAAATTTGTAAAATAAGGGTACGCTCTGTT
 AGGATTCACAGATTGGAGACAAAATTTGCTAGTCGACATGGTCAAAGGGTACTTGTGGTATTCAGTAT
 AGACAAGAGGATATGCCTTTACCTGTGAAGGTATCACCCCTGATATCATCATCAATCCCATGCCATC
 CCCTCTCGTATGACTATTGGTCACTTAATTGAATGCCTTCAAGGGAAGGTATCGGCTAACAGGGTGAA
 ATTGGTATGCCACTCCATTTAATGATGCTGTTAACGTGCAGAAGATTTCTAATCTTTTATCTGATTAT
 GGCTATCATCTCAGAGGAAATGAGGTCCTGTACAATGGTTCACTGGTCGAAAAATCACATCACAATA
 TTTATTGGCCCCACTTATTACCAGCGTTTGAAGCATATGGTGGATGATAAGATTCCTCTCGTGTAGG
 GGACCTATTCAGATCCTCAATAGACAGCCCATGGAGGGTAGATCTCGTGTGGTGGCCTGCGTTTTGGA
 GAAATGGAACGAGATTGTCAGATTGCCATGGAGCAGCCAGTTTTTAAGGGAAGATTGTTTGAGGCA
 TCAGATCCATATCAGTTTCAATGTTTGAATCTTTGGAATAATGGCGATTGCCAACACCAGGACCCAT
 ACATATGAATGCAGGGGCTGCCGCAATAAAACCCAGATTTCTTTGGTGGCAATGCCTTACGCATGCAAA
 CTATTGTTTCAGAACTTATGTCTATGAGTATTGCACCGCAATGATGAGTGT
 ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAAAC

Protein Sequence:

>Peptide sequence encoded by RG239962
 Blue=ORF Red=Cloning site Green=Tag(s)

MLDCNQPRYLLKFEQIYLSKPTHWERDGAQSPMPNPEARLRNL TYSAPLYVDITKVIKEGEEQLQTQH
 QKFTIGKIPIMLRSTYCLLNGLDRLCELNECLDPGGYFIINGSEKVLIAQEKMATNTVYVFAKKDS
 KYAYTGECSRLENSSRPTSTIWSMLARGGQAKKSAIGQRIVATLPYIKQEVPIIIVFRALGFVSDR
 DILEHIIYDFEDPEMMEMVKPSLDEAFVIQEQNVALNF IGSRGAKPGVTKEKRIKYAKEVLQKEMLPV
 GVSDFCETKKAYFLGYMVHRLLLAALGRRELDHRDHYGNKRLDLAGPLLAFLFRGMFKNLLKEVRIYAQ
 KFIDRGKDFNLELAIKTRII SDGLKYSLATGNWGDQKKAHQARAGVSQVLNRLTFASTLSHLRRLNSPI
 GRDGKLAQPRQLHNTLWGMVCPAETPEGHAVGLVKNLALMAYISVGSQPSPILEFLEEWSMENLEEISP
 AAADATKIFVNGCWGIIHKDPEQLMNTLRKLRQMDIIVSEVSMIRDIREREIRIYTDAGRICRPLLI
 VEKQKLLKRRHIDQLKEREYNNYSWQDLVAGSVVEYIDTLEEETVMLAMPDDLQKEVAYCSTYTHC
 EIHPSMILGVCASII PFPDHNQSPRNTYQSAMGKQAMGVYITNFHVRMDTLAHLVYYPQKPLVTTTRSM
 YLRFRELPAAGINSIVAIASVTGYNQEDSVIMNRSVAVDRGFFRSVFYRSYKQESKKGFDQEEVFEKPTR
 ETCQGMRAIYDKLDDDGLIAPGVRVSGDDVIIGKTVTLPENEDLESTNRRYTKRDCSTFLRTSETGI
 VDQVMVTLNQEYKFKIRVRSVRIPQIGDKFASRHGQKGTGCIQYRQEDMPFTCEGITPDIIINPHAI
 PSRMTIGHLIECLQKVSANKGEIGDAPFNDAVNVQKISNLLSDYGYHLRGNEVLNNGFTGRKITSQI
 FIGPTYQRLKHMVDDKIHSRARGPIQILNRQPMGRSRDGLRFEMERDCQIAHGAAQFLRERLFEA
 SDPYQVHVCNLCGIMAIANRTRHTYECRGCNKTQISLVRMPYACKLLFQELMSMSIAPRMSV
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGYFHFYFTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPE
 SVIFTDKIIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

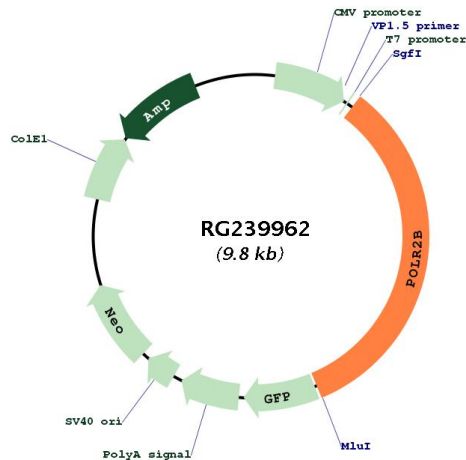
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001303268

ORF Size: 3297 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).
RefSeq:	NM_001303268.1 , NP_001290197.1
RefSeq Size:	3911 bp
RefSeq ORF:	3300 bp
Locus ID:	5431
UniProt ID:	P30876
Cytogenetics:	4q12
Protein Families:	Transcription Factors
Protein Pathways:	Huntington's disease, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase
MW:	125.6 kDa
Gene Summary:	This gene encodes the second largest subunit of RNA polymerase II (Pol II), a DNA-dependent RNA polymerase that catalyzes the transcription of DNA into precursors of mRNA, snRNA and microRNA. This subunit and the largest subunit form opposite sides of the center cleft of Pol II. Deletion of the flap loop region of this subunit results in a decrease in the rate of transcriptional elongation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]