

## Product datasheet for **MG202097**

### Ranbp1 (NM\_011239) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ranbp1 (NM\_011239) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Ranbp1  
**Synonyms:** Htf9a  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG202097 representing NM\_011239  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGCCCAAGGACAGTCACGAGGACCATGATACTTCCACAGAGAATGCAGATGAGTCCAACCACG  
ACCCCCAGTTCGAGCCAATAGTTTCTCTCCCGAGCAAGAAATAAAACGCTGGAGGAAGATGAAGAGGA  
ACTTTTTAAGATGCGTGCAAAGCTGTTCCGTTTGCTTCAGAGAATGACCTCCAGAATGGAAGGAGCGA  
GGCACTGGAGATGCAAGCTTCTGAAGCACAAGGAGAAAGGGACCATCCGCTTCTTATGAGGAGGGACA  
AAACCTTGAAGATATGCGCCAACCACTATATTACCAATGATGGAGCTGAAGCCGAATGCTGGCAGTGA  
CCGAGCCTGGGTCTGGAATACCCACGCGGACTTTGCTGACGAGTGCCCAAGCCTGAGCTGCTCGCCATC  
CGTTCCTAAATGCTGAGAATGCACAAAAGTTCAAACAAAGTTTGAAGAATGCAGGAAAGAAATGAAG  
AGAGAGAAAAGAAAGGACCAGGCAAAAATGATAATGCCGAAAAGGTGGCCGAGAAGCTGGAAGCCCTTTC  
AGTGAGGGAGGCCAGAGAGGAGGCTGAAGAGAAGTCTGAGGAGAAACAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG202097 representing NM\_011239  
Red=Cloning site Green=Tags(s)

MAAAKDSHEDHDTSTENADESNHDPQFEPIVSLPEQEIKTLEEEDEELFKMRAKLRFRASENDLPEWKER  
GTGDVKLLKHKEKGTIRLLMRRDKTLKICANHITPMMELKPNAGSDRAWVWNTHADFADECPKPELLAI  
RFLNAENAQKFKTKFEERKEIEEREKKGPGKNDNAEKVAEKLEALSVREAREEAEEKSEEKQ

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



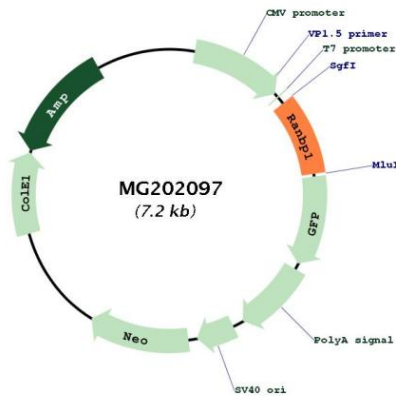
[View online »](#)

**Cloning Scheme:**


- ACCN:** NM\_011239
- ORF Size:** 609 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\\_011239.2](#), [NP\\_035369.2](#)
- RefSeq Size:** 852 bp
- RefSeq ORF:** 612 bp
- Locus ID:** 19385
- UniProt ID:** [P34022](#)
- Cytogenetics:** 16 11.3 cM

**Gene Summary:**

Plays a role in RAN-dependent nucleocytoplasmic transport. Alleviates the TNPO1-dependent inhibition of RAN GTPase activity and mediates the dissociation of RAN from proteins involved in transport into the nucleus (PubMed:9428644). Induces a conformation change in the complex formed by XPO1 and RAN that triggers the release of the nuclear export signal of cargo proteins (By similarity). Promotes the disassembly of the complex formed by RAN and importin beta. Promotes dissociation of RAN from a complex with KPNA2 and CSE1L (PubMed:9428644). Required for normal mitotic spindle assembly and normal progress through mitosis via its effect on RAN (By similarity). Does not increase the RAN GTPase activity by itself, but increases GTP hydrolysis mediated by RANGAP1 (PubMed:9428644). Inhibits RCC1-dependent exchange of RAN-bound GDP by GTP (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**


Circular map for MG202097