

## Product datasheet for **MR222975**

### **II31 (NM\_029594) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** II31 (NM\_029594) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** II31  
**Synonyms:** 1700013B14Rik  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR222975 representing NM\_029594  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATCTTCCACACAGGAACAACGAAGCCTACCCTGGTGTGCTTTGCTGTATAGGAACCTGGCTGGCCA  
CCTGCAGTTGTCCTTCGGTGCCCAATATCGAAGGAAGACTTAAGAACTACAATTGACCTCTTGAACA  
AGAGTCTCAGGATCTTTATAACAACTATAGCATAAAGCAGGCATCTGGGATGTCAGCAGACGAATCAATA  
CAGCTGCCGTGTTTCAGCCTGGACCGGGAAGCATTAAACCAACATCTCGGCATCATAGCACATCTGGAGA  
AAGTCAAAGTGTGAGCGAGAACACAGTAGATACTTCTTGGGTGATAAGATGGCTAACAAACATCAGCTG  
TTTCAACCCACTGAATTTAAACATTTCTGTGCCTGGAAATACTGATGAATCCTATGATTGTAAAGTGTT  
GTGCTTACGGTTTTAAAGCAGTTCTCAAACATGCATGGCAGAACTGCAGGCTAAGGACAATACTACATGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR222975 representing NM\_029594  
**Red=Cloning site Green=Tags(s)**

MIFHTGTTKPTLVLLCCIGTWLATCSLSFGAPIISKEDLRTTIDLLKQESQDLNNYSIKQASGMSADESI  
QLPCFSLDREALTNI SVIIAHLEKVKVLSSENTVDTSWVIRWLTNISC FNPLNLSVPGNTDES YDKV  
VLTVLKQFSNMAELQAKDN TTC

**TRTRPLEQKLI SEEDLAANDILDYKDDDDKV**

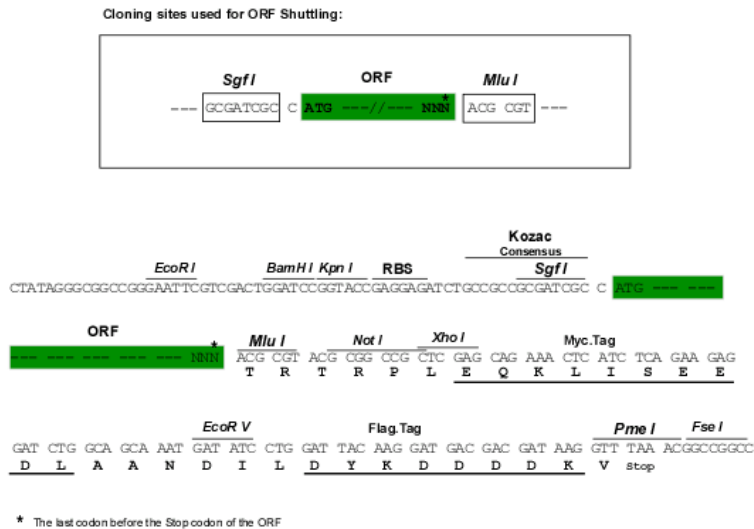
**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9052\\_g05.zip](https://cdn.origene.com/chromatograms/mm9052_g05.zip)



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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_029594

**ORF Size:** 489 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_029594.2](#)

**RefSeq Size:** 810 bp

**RefSeq ORF:** 492 bp

**Locus ID:** 76399

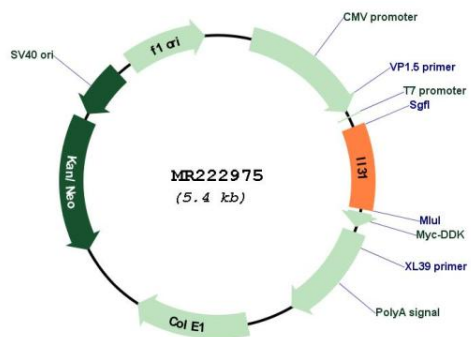
**UniProt ID:** [Q6EAL8](#)

**Cytogenetics:** 5 F

**MW:** 18.6 kDa

**Gene Summary:** Activates STAT3 and possibly STAT1 and STAT5 through the IL31 heterodimeric receptor composed of IL31RA and OSMR (PubMed:15184896). May function in skin immunity (PubMed:15184896). Enhances myeloid progenitor cell survival in vitro (PubMed:17379091). Induces RETNLA and serum amyloid A protein expression in macrophages (PubMed:25847241).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR222975