

## Product datasheet for **MG222051**

### Ros1 (NM\_011282) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ros1 (NM_011282) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ros1
Synonyms:	c-ros; Ros-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222051 representing NM_011282 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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**Protein Sequence:** >MG222051 representing NM\_011282  
 Red=Cloning site Green=Tags(s)

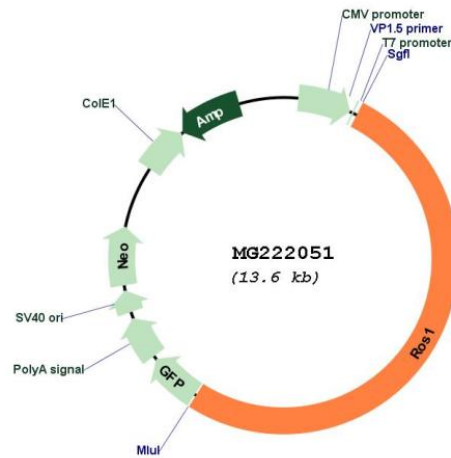
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 CGEAAPTGGVINKGFEGEDDEMVTLSDDTMPVALMETKNQEGLNMYMLATKCSQGE  
 GSYEGPLGPKELGSCDLKDKKQPQADKDFCQEPQVAYGSPGLSEGLNYACLAHSEHG  
 DVSE

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



Plasmid Map:



ACCN: NM\_011282

ORF Size: 7020 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\\_011282.2](#), [NP\\_035412.2](#)

**RefSeq Size:** 7401 bp

**RefSeq ORF:** 7023 bp

**Locus ID:** 19886

**UniProt ID:** [Q78DX7](#)

**Cytogenetics:** 10 26.18 cM

**Gene Summary:** Orphan receptor tyrosine kinase (RTK) that plays a role in epithelial cell differentiation and regionalization of the proximal epididymal epithelium. May activate several downstream signaling pathways related to cell differentiation, proliferation, growth and survival including the PI3 kinase-mTOR signaling pathway. Mediates the phosphorylation of PTPN11, an activator of this pathway. May also phosphorylate and activate the transcription factor STAT3 to control anchorage-independent cell growth. Mediates the phosphorylation and the activation of VAV3, a guanine nucleotide exchange factor regulating cell morphology. May activate other downstream signaling proteins including AKT1, MAPK1, MAPK3, IRS1, and PLCG2.[UniProtKB/Swiss-Prot Function]