

## Product datasheet for **MG225166**

### Tnr (NM\_022312) Mouse Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | Tnr (NM_022312) Mouse Tagged ORF Clone                                      |
| Tag:                      | TurboGFP  |
| Symbol:                   | Tnr   |
| Synonyms:                 | J1-tenascin; janusin; restrictin; TN-R                                      |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-AC-GFP (PS100010)   |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| ORF Nucleotide Sequence:  | >MG225166 representing NM_022312<br>Red=Cloning site Blue=ORF Green=Tags(s) |

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Protein Sequence: >MG225166 representing NM\_022312  
 Red=Cloning site Green=Tags(s)

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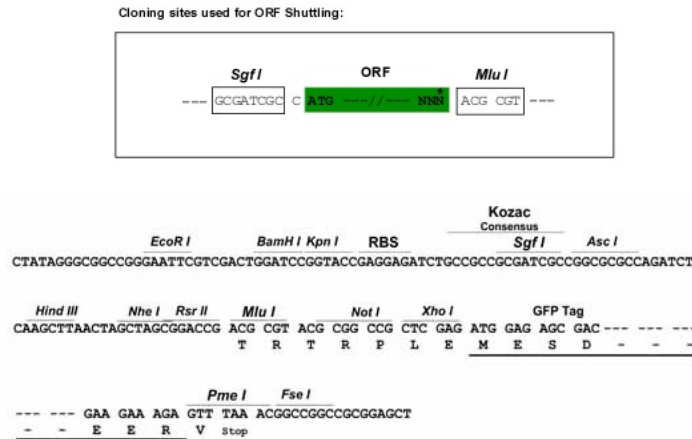
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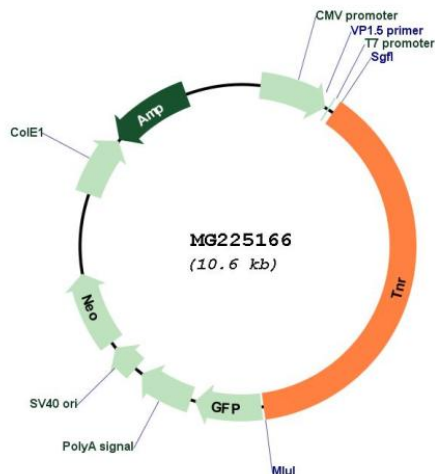
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_022312

ORF Size: 4074 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\\_022312.3](#), [NP\\_071707.2](#)

RefSeq Size: 5395 bp

RefSeq ORF: 4077 bp

Locus ID: 21960

UniProt ID: [Q8BYI9](#)

Cytogenetics: 1 H1

**Gene Summary:**

Neural extracellular matrix (ECM) protein involved in interactions with different cells and matrix components. These interactions can influence cellular behavior by either evoking a stable adhesion and differentiation, or repulsion and inhibition of neurite growth. Binding to cell surface gangliosides inhibits RGD-dependent integrin-mediated cell adhesion and results in an inhibition of PTK2/FAK1 (FAK) phosphorylation and cell detachment. Binding to membrane surface sulfatides results in oligodendrocyte adhesion and differentiation. Interaction with CNTN1 induces a repulsion of neurons and an inhibition of neurite outgrowth. Interacts with SCN2B may play a crucial role in clustering and regulation of activity of sodium channels at nodes of Ranvier. TNR-linked chondroitin sulfate glycosaminoglycans are involved in the interaction with FN1 and mediates inhibition of cell adhesion and neurite outgrowth. The highly regulated addition of sulfated carbohydrate structure may modulate the adhesive properties of TNR over the course of development and during synapse maintenance (By similarity).[UniProtKB/Swiss-Prot Function]