

## Product datasheet for **MG211051**

### Tyro3 (BC066058) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tyro3 (BC066058) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tyro3
Synonyms:	Dtk, Rse, Sky, Tif, Etk-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG211051 representing BC066058  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGCTGAGGGCGAGCATGGGGTGGCCGGGGCTCCGGCCGCTGCTGCTGGCGGGACTGGCTTCTCTGC  
 TGCTCCCCGGGTCTGCGGCCGACGGCCTGAAGCTCATGGGCGCCCCAGTGAAGATGACCGTGTCTCAGGG  
 GCAGCCAGTGAAGCTCAACTGCAGCGTGGAGGGATGGAGGACCTGACATCCACTGGATGAAGGATGGC  
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 TAAAGTCAGTGAACGGTCTGATGCTGGCCTGTACTGGTGCCAGGTGAAGGATGGGGAGGAAACCAAGAT  
 TTCTCAGTCAGTATGGCTCACTGTCGAAGGTGTGCCATTCTTACAGTGAACCAAAAAGATCTGGCGGTG  
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 ACCAGAGGCTGTTGTGCTGCAGCAAGGGCTACTGCCTCACAGTAGCTGT

AGCGGACCGACGCGTACGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG211051 representing BC066058  
 Red=Cloning site Green=Tags(s)

MALRRSMGWPLRPLLLAGLASLLLPGSAAAGLKLMGAPVKMTVSQGQPVKLNCSVEGMEDPDIIHWMKDG  
 TVVQNASQVSIISSEHSWIGLLSLKSVERSDAGLYWCQVKDGEETKISQSVWLTVEGVPPFTVEPKDLAV  
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 ATNYSRLRVCANALGPSYGDWVPFQTKGLAPARAPQNFHAIRTDGLILEWEEVIPEDPGEGPLGPYKL  
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 SDELKEKLEDVLIPEQQFTLGRMLGKGEFGSVREAQLKQEDGSFVKVAVKMLKADIIASSDIEEFLREAA  
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 VHSVDVAFVMTMWEIMTRGQTPYAGIENAEIYNYLIGGNRLKQPPECMEEVYDLMYQCWSADPKQRPST  
 CLRMELENILGHLVLSVSTSQDPLYINIERAEQPTESGSPVHCGERSSEAGDGSVGVAVGGIPSDSRYI  
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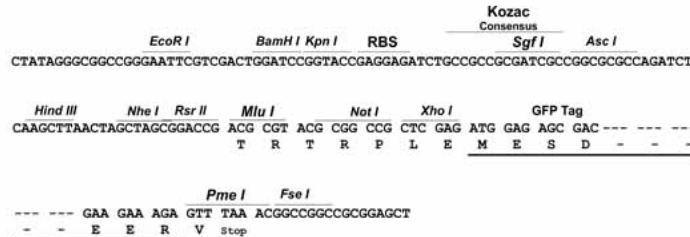
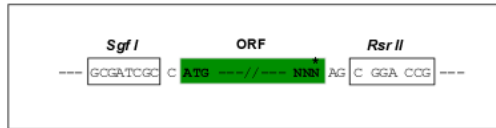
SGPTRRRLE - GFP Tag - V

**Restriction Sites:**

SgfI-RsrII

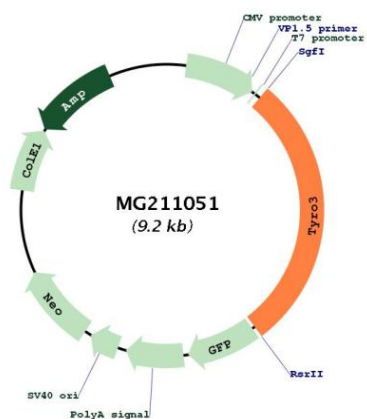
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



<b>ACCN:</b>	BC066058
<b>ORF Size:</b>	2642 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">BC066058</a> , <a href="#">AAH66058</a>
<b>RefSeq Size:</b>	4005 bp
<b>RefSeq ORF:</b>	2642 bp
<b>Locus ID:</b>	22174
<b>Cytogenetics:</b>	2 59.97 cM
<b>Gene Summary:</b>	Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to several ligands including TULP1 or GAS6. Regulates many physiological processes including cell survival, migration and differentiation. Ligand binding at the cell surface induces dimerization and autophosphorylation of TYRO3 on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with PIK3R1 and thereby enhances PI3-kinase activity. Activates the AKT survival pathway, including nuclear translocation of NF-kappa-B and up-regulation of transcription of NF-kappa-B-regulated genes. TYRO3 signaling plays a role in various processes such as neuron protection from excitotoxic injury, platelet aggregation and cytoskeleton reorganization. Plays also an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by activating STAT1, which selectively induces production of suppressors of cytokine signaling SOCS1 and SOCS3.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG211051