

Product datasheet for **MG225754**

Rictor (NM_030168) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rictor (NM_030168) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rictor
Synonyms:	4921505C17Rik; 6030405M08Rik; AVO3; AW492497; D530039E11Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225754 representing NM_030168 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGGCGGCGATCGGCCGCGGCCGCTCTCTGAAGAACCTCCGAATACGAGGGCGGAATGACAGCGGCGAGG
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AGCCTTCATTTAGATCACATCATTTCAGAAAACAATCGCAACTCACCACAAGCGGGATCAGTATCTTCGAG
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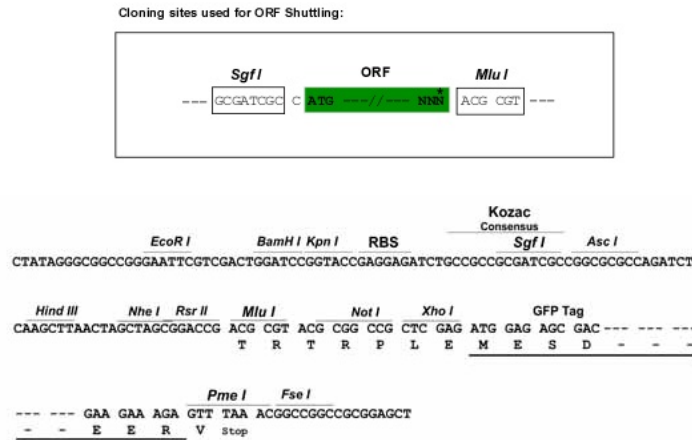
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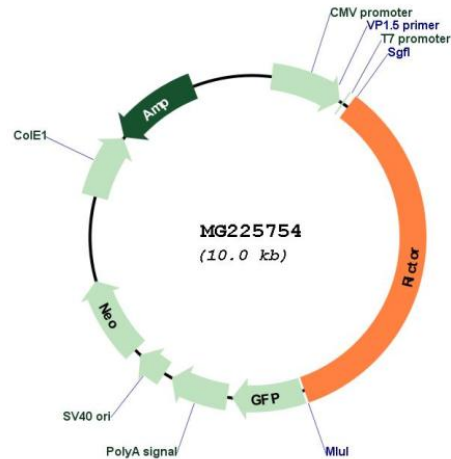
Protein Sequence: >MG225754 representing NM_030168
 Red=Cloning site Green=Tags(s)

MAAIGRGRSLKNLRIRGRNDSGEENVPLDLTREPNDLREILQNVAKLQGVSNMRKLGHLNNFTKLLCDI
 GHSEELGFNYEDIICLRALLNEAKEVRAAGLRALRYLIQDSSILQKVLKLVKVDYLIARCIDIQQSNE
 VERTQALRLVRKMITVNASLFPSSVANSIAVGNLQERDRMVRACIAICELALQNPEVVALRGLNT
 ILKNVIDCQLSRINEALITLILHLLNHPKTRQYVRADVELERILAPYTDFFHYRHSPDTAEGQLKEDREAR
 FLASKMGIATFRSWAGIINLCKPGNSGIQSLIGVLCIPNMEIRRGLLEVLYDIFRLPLPVVDFIEAL
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 RFGSTSTSTFFLDINEDAEPAYDRPGPIKDKNSFPFFGSSKLVKNRILNSLTLPTKKHRSDDPKGGKL
 SSENKTSNRRIRTLTEPSVDLITAKTSQAPQHRNHYS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
 Cloning Scheme:



Plasmid Map:


ACCN: NM_030168

ORF Size: 5124 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_030168.3](#), [NP_084444.3](#)

RefSeq Size: 9328 bp

RefSeq ORF: 5127 bp

Locus ID: 78757

UniProt ID: [Q6QI06](#)

Cytogenetics: 15 A1

Gene Summary:

Subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals. mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-422'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. Plays an essential role in embryonic growth and development.[UniProtKB/Swiss-Prot Function]