

Product datasheet for **MG222754**

Adgra2 (NM_054044) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adgra2 (NM_054044) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Adgra2
Synonyms:	8430414O08Rik; 9530074E10Rik; Gpr124; mKIAA1531; Tem5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222754 representing NM_054044 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >MG222754 representing NM_054044
 Red=Cloning site Green=Tags(s)

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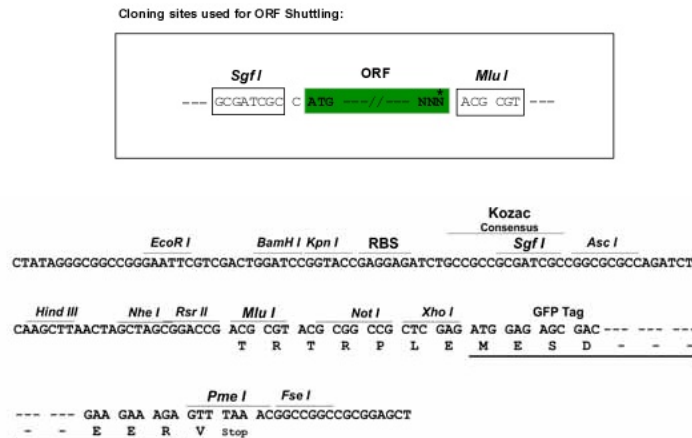
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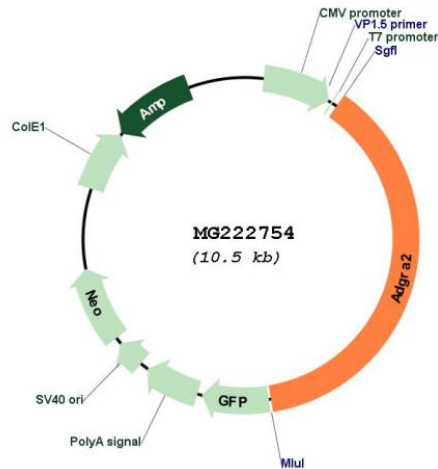
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_054044

ORF Size: 4008 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_054044.1](#)

RefSeq Size: 5520 bp

RefSeq ORF: 4011 bp

Locus ID: 78560

UniProt ID: [Q91ZV8](#)

Cytogenetics: 8 A2

Gene Summary:

Endothelial receptor which functions together with RECK to enable brain endothelial cells to selectively respond to Wnt7 signals (WNT7A or WNT7B) (PubMed:25373781, PubMed:25558062, PubMed:28803732). Plays a key role in Wnt7-specific responses, such as endothelial cell sprouting and migration in the forebrain and neural tube, and establishment of the blood-brain barrier (PubMed:21071672, PubMed:21282641, PubMed:21421844, PubMed:25373781, PubMed:28288111). Acts as a Wnt7-specific coactivator of canonical Wnt signaling: required to deliver RECK-bound Wnt7 to frizzled by assembling a higher-order RECK-ADGRA2-Fzd-LRP5-LRP6 complex (By similarity). ADGRA2-tethering function does not rely on its G-protein coupled receptor (GPCR) structure but instead on its combined capacity to interact with RECK extracellularly and recruit the Dishevelled scaffolding protein intracellularly (By similarity). Binds to the glycosaminoglycans heparin, heparin sulfate, chondroitin sulfate and dermatan sulfate (By similarity).[UniProtKB/Swiss-Prot Function]