

Product datasheet for **MC224269**

Adgra2 (NM_054044) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Adgra2 (NM_054044) Mouse Untagged Clone
Tag: Tag Free
Symbol: Adgra2
Synonyms: 8430414O08Rik; 9530074E10Rik; Gpr124; mKIAA1531; Tem5
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224269 representing NM_054044
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGCGCGGGGGACGCAGGATGCCGGTGCTCCCGCGGTTTGGTGTGCTGCCGCTGCTGCCTTGTC
 TTCTGCTCCTGGCTCCTGGAACCGGGTGGCCCTGGCTGCCCGGTCCTATCCGCGTTGCAAGTGCTC
 TGGGGAGCGGCCAAGGGACTAAGTGGCGCGCCACAACCCGGCTCGAAGGAGGGTGGTGTGCGGCGGT
 GGGGATCTCCCCGAACCTCCAGATCCCGCCTTCTGCCAAACGGCACCATCACCTTGCTCTTGAGCAACA
 ACAAGATTACTGGGCTCCGCAATGGATCCTTCTGGGACTGTCCCTGTTGGAGAAGTTGGACCTGAGGAG
 CAATGTATCAGCACTGTGCAGCCTGGAGCCTTCTAGGTCTGGGAGAGCTAAAACGCTTAGATCTCTCC
 AACAATCGGATTGGCTGTCTCACCTCTGAGACATTTCAAGGGCTCCCTAGACTTCTCAGACTAAACATAT
 CTGGAACATCTACTCTAGTCTGCAACCTGGGGTCTTTGATGAGCTGCCAGCCCTAAGATTGTGGACTT
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 CAGCTGTCTGAGCGCACACTCTGTGCCTACCCAGTGCCCTGCACGCCATGCCCTGAGCAGCCTCCAGG
 AGTCCCAGCTTCGCTGTGAAGGGGCCCTGGAAGTGCACACCCACTACCTCATCCATCCCTCGCCAAAT
 GGTGTTCCAGGGTGACCGCTGCCCTTCCAGTGTGAGCCAGCTACTGGGCAACGATACCGGATCCAC
 TGGTACCACAATGGGGCTCCTATGGAGAGCGATGAGCAGGCCGGCATCGTCTTGTGAAAACTTATCC
 ATGATTGCACCTTCATCACCAGTGAAGTACCCTGTCTCACATTGGTGTGTTGGCCCTCTGGTGAATGGGA
 GTGCTCCGTGTCCACAGTCCAAGGCAACACCAGCAAGAAGGTGGAGATAGTAGTGTGGAGACCTTGCC
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 TCACGGCTTACCAGTCTGTTTACAGTACCCTTACCTCTGTGCCCTTGGTGGGGAGCCCCGGGTAC
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 CCACCAGCTGCGAGTGTATACCGAGAGGCCGAGCTTCTCAGACATGATGGAGCTGGTCTATGTGGC
 TCAGATGATCCAGAAGTTTTTGGTTACGTTGACCAGATCAAGGAGCTGGTGGAGGTGATGGTGGACATG
 GCCAGCAACCTGATGCTGGTGGATGAGCACCTTCTGTGGCTGGCCAGAGAGAAGACAAAGCCTGCAGTG



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GCATTGTGGGTGCCCTGGAGCGAATCGGAGGAGCTGCTCTTAGCCCCATGCCAGCACATCTCTGTGAA
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TTCCAGAGGAGGGAGGTAGGAGTGTCCGGTGCACAGCCAAGCAGCGTCGGCCAGGATGCCCCAGTGGAGC
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AGGATGGTGAATGGCGTATATTCTCCTGGAGTCCAGCTGGGGCGCTGATGACCACGATTTCTGTACCT
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CGGTCTTCCACTCGAGGGTGAAGCCATGCTTACGCCGTGCGAGGGCAGTACACAAGCGCCGCGCAATC
GCTGAGACGGGGCGCCCCGGGCAGCGCCGAGCCAGCCGTGACAACCTCAAGGGCAGCGGCAGCGCGC
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AAAAGCGAGACCACCGCTAG
    
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_054044
- Insert Size:** 4011 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_054044.2](#), [NP_473385.2](#)

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]