

Product datasheet for **MR210044**

Adgrg1 (NM_018882) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adgrg1 (NM_018882) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Adgrg1
Synonyms:	Cyt28; Gpr56; TM7LN4; TM7XN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR210044 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGTCCAGGTGCTGCGGCAGATGGTCTACTTCTACTGAGTCTGTTTTCTCTGGTGAAGGTGCAC
 ACAGTGGCAGCCCCGAGAAGACTTCCGCTTCTGTGGCCAGCGGAACCAGACCCAACAGAGCACCCCTCCA
 CTATGATCAATCTTCAGAGCCTCACATCTTTGTGTGGAACACAGAGGAGACCCTCACAATTCGTGCCCCC
 TTCCTGGCAGCCCCAGATATTCCCCGCTTCTTCCAGAGCCTAGAGGGCTCTATCACTTCTGCCTTACT
 GGAGTGCACACTGGGAGACTCCACTTGCCTATGGCAAGCATGACTACCTGCTTAGTAGCCAAGCCTC
 CAGACTCCTCTGCTTCCAGAAACAGGAGCAGAGCCTGAAGCAGGGAGCCCCGCTGATCGCCACCTGTGC
 AGCTCCTGGCAGATCCCCAGAACCAGCCTGCCTGGGCTCCGAGCTTCATCTTCTCCTCCACAATG
 CCCCACACAAGGTCTCCACAATGCATCTGTGGACATGTGTGATCTCAAGAAGGAATTGCAGCAGCTTAG
 CAGGTACCTGCAGCACCTCAAAGGCTGCCAAGCGGCCACCGCAGCGTTCATCAGCCAGCAGTTACAG
 AGCCTGGAGTCAAAGCTGACCTCTGTGAGCTTCCCTGGGAGACACATTATCCCTTTGAGGAGACCGGGTCA
 ATGCTACAGTGTGGAAGCTGCCACCCACAGCCGGTCTAGAGGATCTGCATATCCACTCCCAGAAGGAGGA
 GGAGCAGAGTGAAGTCCAGGCATACTCGCTGTTGCTTCCCCGGGCCGATTCCAGCAGACCAGAGCCGT
 CGCCGGGATGACGCCAAGAGGCTCCTGGTAGTAGACTTACAGCAGCAAGCTTTGTTCCAGGACAAGAATT
 CTAGCCAAGTCTGGGTGAGAAGTCTTGGGTATTGTCGTGCAGAACACCAAAGTACCAACCTCTCAGA
 TCCGGTGGTACTACCTTCCAGCACCAGCCTCAGCCAAAAATGTGACTCTGCAGTGCCTGTTCTGGGT
 GAAGACCCGGCATCAAGCAGCACAGGGAGCTGGAGCAGTGCAGGCTGCGAGACAGTGAGCAGAGACAC
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 CACTCACAAACACTACCTCAGCTCCTGTCTAGTGGGCTGTGTCATCTCTGCTTGGCTTGTCTTTC
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 GGCTACAATCTTACCGACTGGTGGTGGAGTCTTCGGTACCTATGTGCCGGCTATCTGCTCAAGCTGA
 GCATCGTGGGCTGGGTTTTCTGTCTTCTGGTCACTCTGGTGGCGTTGGTGGATGTGAATAACTACGG
 CCCCATTATCCTAGCTGTGCGCCGACTCCGGAACGTGCACCTACCCCTCTATGTGCTGGATCCGGGAC
 TCCCTGGTGGTATGTACCAACCTGGGCCTTTCAGTCTGGTGTTCCTGTTCAACCTGGCTATGTGG
 CCACCATGGTGGTGCAGATCCTGCGGCTTCGCCCCACAGCCAGAAGTGGCCCCACGTGCTGACCCCTGCT
 GGGCCTCAGCCTGGTCTTGGCCTCCCCTGGGCCTTGGTCTTCTTTCTTTGCTTCCGGCACCTTCCAG
 CTTGTCATCCTCTACCTTTCAGCATATAACTTCCCTCAAGGCTTCTCATCTTCTGTGGTACTGGT
 CCATGCGGTTCCAGGCCAAGGCGGCCCTCCCCTCTGAAGAACAACCTCAGACAGCGCCAAACTCCCCAT
 CAGCTCCGGCAGCACCTCCTCCAGCCGCATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210044 protein sequence
Red=Cloning site Green=Tags(s)

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MAVQVLRQMVFYLLSLFSLVQGAHSGSPREDFRFCGQRNQTQQSTLHYDQSSEPHIFVWNTTEETLTIRAP
FLAAPDIPRFFPEPRGLYHFCLYSRHTGRLHLRYGKHDYLLSSQASRLLCFQKQEQLKQGAPLIATSV
SSWQIPQNTSLPGAPSFIFSFHNAPHKVSHNASVDMCDLKKELQQLSRYLQHPQKAAKRPTAAFISQQLQ
SLESKLTSVSFLGDTLSFEEDRVNATVWKLPPTAGLEDLHIHSQKEEEQSEVQAYSLLLPRAVFQQTRGR
RRDDAKRLLVDFSSQALFQDKNSSQVLGEKVLGIVVQNTKVTNLSDPVLTTFQHQPQPKNVTLCQVFWV
EDPASSSTGSWSAGCETVSRDTQTSCLCNHLYFAVLMVSSSTEVEATHKHLYLTLSSYVGCVISALACVF
TIAAYLCSRRKSRDYTIKVMNLLSAVFLLDVSFLLSEPVALTGSEAACRTSAMFLHFSLLACLSSWMGLE
GYNLYRLLVVEVFGTYVPGYLLKLSIVGWGFPVFLVTLVALVDVNNYGPIILAVRRTPERVTPSMCWIRD
SLVSYVTNLGLFSLVFLNLAMLATMVVQILRLRPHSQNWPVHLTLLGLSLVLGLPWALVFFSFASGTGF
LVILYLSIITSFQGLIFLWYWSMRFQAQGGPSPLKNNSDSAKLPISSGSTSSRI
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_018882

ORF Size: 2064 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_018882.3](#)

RefSeq Size: 3555 bp

RefSeq ORF: 2064 bp

Locus ID: 14766

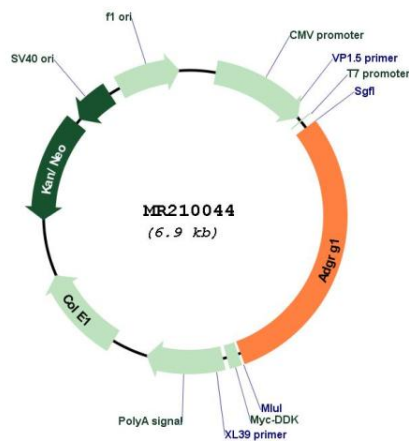
UniProt ID: [Q8K209](#)

Cytogenetics: 8 47.12 cM

MW: 77.3 kDa

Gene Summary: Receptor involved in cell adhesion and probably in cell-cell interactions. Mediates cell matrix adhesion in developing neurons and hematopoietic stem cells. Receptor for collagen III/COL3A1 in the developing brain and involved in regulation of cortical development, specifically in maintenance of the pial basement membrane integrity and in cortical lamination (PubMed:21768377). Binding to the COL3A1 ligand inhibits neuronal migration and activates the RhoA pathway by coupling to GNA13 and possibly GNA12 (By similarity). Plays a role in the maintenance of hematopoietic stem cells and/or leukemia stem cells in bone marrow niche (PubMed:23478665). Plays a critical role in tumourigenesis (By similarity). Plays essential role in testis development (PubMed:20981830).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210044