

Product datasheet for **MG211489**

Itga4 (NM_010576) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Itga4 (NM_010576) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Itga4
Synonyms:	CD49D; Itga4B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211489 representing NM_010576 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGCGGAAGCGAGGTGCAGACCGAGGTCCCAGGGATCGCCCTCCGGAAGCGGTGATGCTGTTGT
TGTACTTCGGGGTGCCAACCGGGCACTCTACAACCTGGACCCGGAGAATGCACTGCTGTACCAGGGCCC
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CTTCCATCTGTGTGCATGCATCTTACACTGTGTTTCTCATATAAAGGCAAAGAGGTCCCAGGCTACATCG
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 TCTTTAAAAGACAGTACAAATCTATCCTACAAGAAGAAAAACAGGAGAGACAGCTGGAGTTATGTCAACAG
 CAAAAGCAATGATGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG211489 representing NM_010576
 Red=Cloning site Green=Tags(s)

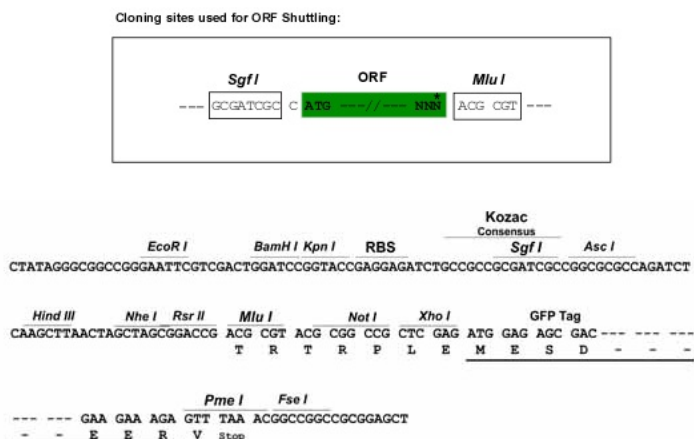
MAAEARCRPRSRGIALREAVMLLLYFGVPTGHSYNLDPENALLYQGPSGLTFGYSVVLHSHGSKRWLIVG
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 KEASVHIQLEGRPSILEMDETSSLKFEIKATAFPEPHPKVIELNKDENVAHVFLLEGLHHQRPKRHFIIII
 ITISLLGLIVLLLISCVMWKAGFFKRQYKSILQEENRRDSWSYVNSKSNDD

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_010576

ORF Size: 3096 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_010576.2](#)

RefSeq Size: 9833 bp

RefSeq ORF: 3099 bp

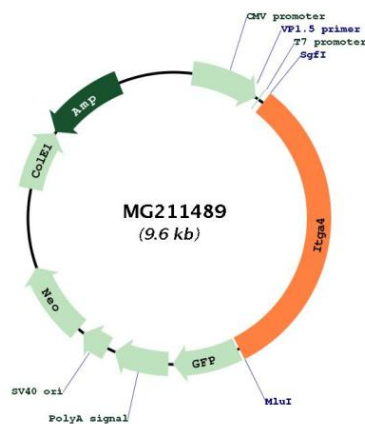
Locus ID: 16401

UniProt ID: [Q00651](#)

Cytogenetics: 2 47.38 cM

Gene Summary: Integrins alpha-4/beta-1 (VLA-4 or LPAM-2) and alpha-4/beta-7 (LPAM-1) are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-4/beta-7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells. ITGA4:ITGB1 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1-dependent fractalkine signaling. ITGA4:ITGB1 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG211489