

Product datasheet for **MG226636**

Itgb2 (NM_008404) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Itgb2 (NM_008404) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Itgb2
Synonyms:	2E6; AI528527; Cd18; LAD; LCAMB; Lfa1; MF17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226636 representing NM_008404
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGGCCCACTCACTGCTGCTTGCCTAGCTGGACTGTTCTTCTGGGATCTGCTGTGCCAGG
 AATGCACCAAGTACAAAGTCAGCAGTTGCCGGACTGTATCCAGTCGGGGCTGGCTGTTCTGGTGCCA
 GAAGCTGAACTTCACTGGACCAGGAGAACCTGACTCCTTGCGCTGTGACACACGGGCACAGCTGCTGCTG
 AAGGGTTGTCCAGCCGATGATATCATGGACCCAGGAGCATCGCTAATCCTGAGTTCGACCAACGGGGGC
 AACGGAACAGCTATCTCCAAAAAGTGACACTTTACTTGCAGCAGGACAGGCTGCCGATTCAATGT
 GACTTTCCGGCGGGCCAAGGGATACCCATTGATCTGTACTACCTCATGGATCTCTCTACTCCATGCTT
 GATGACCTCAACAACGTCAAGAAGCTGGCGGGGACTTGTGCAGGCCCTCAACGAGATCCCGAGTCTG
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 GAGGAACCATGTCCCAACAAGGAGAAGGCTGCCAGCCCCATTGCTTTTCGGACGTGCTCAAGTTA
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 AGGGTGGGCTGGATGCCATAATGCAAGTTGCTGCATGTCCGGAGGAAATTGGCTGGCGCAATGTCACGAG
 GCTGCTGGTGTGGCCACAGACGATGGCTTCCACTTTGCTGGTGTGGCAAACCTGGTGCCATCCTGACC
 CCCAATGATGGCCGCTGCCACCTGGAGGATAACATGTACAAGAGGAGCAATGAGTTCGACTACCCATCCG
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 GAAAACGTATGAGAACTCACGGAGATCATCCCAAGTCAGCAGTGGGGAACTGTCTGACGACTCCAGC
 AACGTGGTGCAGCTCATCAAGAATGCCTACTATAAACTCTCTCTAGAGTCTTCTGGACCACAGACCC
 TCCCGGACACCCTGAAAGTCACCTATGACTCCTTCTGCAGTAATGGAGCATCGAGTATAGCAAAATCCCG
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 CAGGAGCTGGAGAGAACTGTCGGAAGGACAATAGTTCATCGTGTGCTCAGGGCTTGGGGACTGCATCT
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 CAATGTCAACTGTGAGAGATATAACAGCCAAGTCTGCGGTGGCTCAGATCGGGTTCTGCAACTGTGGC
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 GAGTGCCTGAAGTTTGATAAGGGCCCTTTTGAAGAAGTGTAGTGTTCAGTGTGCTGGTATGACGCTGC
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 GGAAGGCCCTGACCCACCTGACTGACCTCAGGGAGTACAGGCGCTTTGAGAAGGAGAACTCAAGTCCCA
 ATGGAACAATGACAACCCCTCTTCAAGAGTGTACGACAACGGTCATGAACCCCAAGTTTGTGAAAGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG226636 representing NM_008404
Red=Cloning site Green=Tags(s)

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MLGPHSLLLALAGLFFLGSAVSQECTKYKVSSCRDCIQSGPGCSWCQKLNFTGPGEPDSLRCDDTRAQLLL
KGCPADDIMDPRSIANPEFDQQRQKQLSPQKVTLYLRPGQAAAFNVTFRRAKGYPIDLYLMDLSYSML
DDLNNVKKLGGDLLQALNEITESGRIGFGSFDKTVLPFVNTHEKLRNCPNKEKACQPPFAFRHVLKL
TDNSNQFQTEVGGKQLISGNLDAPEGGLDAIMQVAACPEEIGWRNVTRLLVFATDDGFHFAGDGKLGAILT
PNDGRCHLEDNMYKRSNEFDYPSVQQLAHKLSESNIQPIFAVTKKMKVITYEKLTEIIPKSAVGELSDSS
NVVQLIKNAYYKLSRVFLDHSTLPDTLKVTYDSFCSNGASSIGKSRGDCDGVQINNVPVTFQVKVMASEC
IQEQSFVIRALGFTDVTYVQVRPQCECQCRDQSREQSLCGGKGMMECGICRCESGYIGKNCECQTQGRSS
QELERNCRKDSSIVCSGLGDCICGQCVCHTSDVPNKEIFGQYCECDNVNCERYNSQVCGGSDRGSCNCG
KCCKPGYEGSACQQRSTTGCLNARLVECSGRGHCQCNRCICDEGYQPPMEDCPSCGSHCRDNHTSCA
ECLKFDKGPFEKNCVQACAGMTLQTIPLKKPKKERDSEGCWITYTLQKQDGRNIYNIHVEDSLECVKGP
NVAAIVGGTVVGVVIGVLLLVIWKALTHLTDLREYRFEKEKLSQWNNNDNPLFKSATTVMNPKFAES
    
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_008404

ORF Size: 2310 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_008404.5](#)

RefSeq Size: 2862 bp

RefSeq ORF: 2313 bp

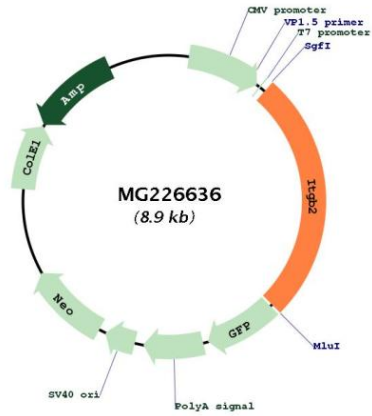
Locus ID: 16414

UniProt ID: [P11835](#)

Cytogenetics: 10 39.72 cM

Gene Summary: Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrin ITGAL/ITGB2 is also a receptor for the secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL (By similarity). Integrins ITGAM/ITGB2 and ITGAX/ITGB2 are receptors for the iC3b fragment of the third complement component and for fibrinogen. Integrin ITGAX/ITGB2 recognizes the sequence G-P-R in fibrinogen alpha-chain. Integrin ITGAM/ITGB2 recognizes P1 and P2 peptides of fibrinogen gamma chain. Integrin ITGAM/ITGB2 is also a receptor for factor X. Integrin ITGAD/ITGB2 is a receptor for ICAM3 and VCAM1. Contributes to natural killer cell cytotoxicity (By similarity). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (By similarity). Triggers neutrophil transmigration during lung injury through PTK2B/PYK2-mediated activation (PubMed:18587400). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (By similarity). In association with alpha subunit ITGAM/CD11b, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (By similarity). Integrin ITGAM/ITGB2 plays a critical role in mast cell development and in immune complex-mediated glomerulonephritis. Mice expressing a null mutation of the ITGAM subunit gene demonstrate increase in neutrophil accumulation, in response to a impaired degranulation and phagocytosis, events that apparently accelerate apoptosis in neutrophils. These mice develop obesity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226636