

## Product datasheet for **MC223350**

### **Itga5 (NM\_010577) Mouse Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Itga5 (NM_010577) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Itga5
Synonyms:	Cd49e; F; Fnra; VLA5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223350 representing NM_010577 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGAGCTGGACGCCACGGTCGCCTCGATCTCCTCTCCACGGGTGCTGCTGCGCTGGGGCCCCGAC  
GCCTACCGCCGCTGCTGCCTCTGCTGCTACTGTGGCCGCCACCACTCCAGGTTGGGGGCTTCAACCT  
AGACGGGAGGCCCGGGGCTGCTCTCCGGGCCCGGCTCCCTTTTGGCTTCTCCGTGGAGTTTAC  
CGGCCGGGAAGGACGGAGTCAGTGTGCTGTTGGGACCCAAGGCTAACACTAGCCAGCCAGGTGAC  
TGCAAGGTGGTGTCTATGTGTGTCCTGGGACCAAGCTCCTATCCAGTGCACCACATTCAATTTGA  
CAGCAAAGGCTCCCGATTCTGGAGTCCCTCACTGTACAGTGCCAAGGAGAGGAGCCTGTGGAGTACAAG  
TCCTTGCAAGTGGTTCGGAGCAACAGTTCGGGCCCATGGCTCCTCCATCTTGGCATGTGCTCCACTGTATA  
GCTGGCGCACAGAAAAGGACCCACAGAATGACCCAGTGGGCACCTGCTACCTCTCCACAGAAAATTAC  
CCGATTCTGGAGTACGCACCTTGCCGCTCAGATTTTGGCAGTGCAGCAGGGCAGGGCTACTGCCAAGG  
GGCTTCAGTGTGAGTTCACCAAGACTGGCCGTGGTCTGGTGGACCTGGAAGCTACTTCTGGCAAG  
GCCAGATCCTGTCCGCACTCAAGAGCAGATCTCGGAGTCTATTACCCAGAGTATCTCATCAACCTGT  
TCAGGGGACAGTGCAGACCCGCCAGGCCAGCTCCGTCTATGATGACAGCTACTTGGGATACTCTGTGGCT  
GTGGGTGAATTCAGTGGTATGACACAGAAGACTTTGTTGCTGGCGTGCCCAAGGGGAACCTCACCTATG  
GCTATGTCACCGTCCCTAATGGCTCAGACATCCACTCCCTACACAGTCTCAGGAGAACAGATGGCCTC  
CTACTTCGGCTATGCTGTGGCTGCCACTGATACCAATGGAGATGGGCTAGATGACCTACTGGTAGGGGCA  
CCCCTGCTCATGGAGCGGACAGCTGATGGGAGACCTCAGGAGGTGGGAGGGTCTACATCTATCTGCAGC  
GCCAGCGGGCATAGATCCACACCCACCCTCACCTCACTGGGCAAGATGAGTTCAGCCGATTCCGCAG  
CTCCTTGACACCCTTGGGGACCTGGACCAAGACGGCTACAATGATGTGCCATTGGGGCTCCATTTGGT  
GGGGAGGCCAGCAGGGAGTCGATTTTATATCCCGGGAGGCCAGGAGGACTGAGCACTAAACCTTCCC  
AGGTTTTGCAGCCTTTGGGACAGTGGCCGTACCCAGACTTCTTTGGCTCTGCCCTTCGAGGAGGACG  
AGATCTGGATGGCAATGGATACCCTGATCTAATCGTTGGATCCTTTGGTGTGGACAAGGCTCTGGTGTAC



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AGAGGGCGGCCATCATATCTGCCAGCGCATCTCTCACCATCTTCCCCTCCATGTTCAACCCAGAGGAGC
GCAGTTGCAGCCTGGAAGGGAACCCTGTGTCTGCATCAACCTTAGCTTCTGCCTCAATGCCTCTGGAAA
ACATGTCCCCAACTCTATAGGCTTCGAGGTGGAACCTCAACTGGACTGGCAGAAGCAAAGGGAGGGGTC
CGGCGGCACTGTTCTGACTTCCAAGCAGGCCACCCTTACCCAGACCCTGCTTATCCAGAATGGGGCTC
GGGAGGACTGCAGGGAGATGAAGATCTACCTCAGGAATGAATCAGAATTCAGAGACAACTCTCCCAAT
TCACATTGCCCTCAACTTCTCCTTGGACCCAAAGCTCCCATGGACAGCCATGGCCTCCGGCCAGTTCTA
CACTACAAAGCAAAGCAGGATAGAGGACAAGGCCAGATCTTGCTGGACTGTGGTGAAGACAATATCT
GTGTGCCTGACCTGCAGCTGGATGTGTATGGGGAGAAGAAACATGTGTACCTGGGTGACAAGAACGCACT
GAACCTGACATTCATGCCCAAAATCTGGGTGAGGGCGGTGCCTATGAAGCCGAGCTTCGGGTACAGCC
CCTCTAGAGGCCGAGTACTCAGGACTTGTGACACACCCAGGGAACCTTCTCCAGCCTGAGCTGTGACTACT
TTGCTGTGAACCAGAGCCGCCAGCTGGTGTGTGACCTGGGCAACCCCATGAAGGCAGGCACCAGTCTCTG
GGGTGGCCTTCGGTTCAGTGTCTCATCTTCAAGACACAAGAAAACCATCCAGTTTGACTTTCAGATC
CTCAGCAAGAACCTGAACAACCTCACAAGCAACGTGGTCTCCTTCCCACTCTCGGTGGAGGCTCAAGCCC
AGGTCTCCCTAATGGTGTCTCCAAGCCTGAAGCTGTGATTTCCAGTCAGCGACTGGAATCCTCAAGA
CCAGCCTCAGAAGGAGGAAGACTTGGGCCAGCTGTCCACCATGTCTACGAGCTCATCAACCAGGGGCC
AGCTCCATCAGCCAGGGTGTGCTGGAGCTCAGCTGTCCACAGGCTCTGGAAGGCCAACAGCTCCTCTATG
TGACCAAGGTGACAGGACTCAGCAACTGCACCTCCAACCTACACCCCAACTCACAGGGCCTGGAGTTGGA
TCCAGAGACCTCTCCACACCACCTGCAGAAACGAGAGGCTCCAGGGAGGAGTTTCTACTGCCTCAGGAAAC
CAAGTTCTGAAATGCCCTGAAGCCAAGTGTTCAGGCTGCGCTGTGAGTTTGGGCCACTGCACCCGCAAG
AGAGCCGTAGTCTGCAGCTGCATTTCCGAGTCTGGGCCAAGACCTTCTTGCAGCGGGAATACCAGCCATT
TAGCCTTCAGTGTGAGGCTGTATATGAAGCTCTGAAGTGCCTACCAGATCCTGCCTCGGCAGCTTCCC
AAAAGAACTTCAGGTGGCCACAGCCGTGCAGTGGACCAAGGCAGAAGGCAGCAATGGTGTCCCCTTGT
GGATCATCATCTAGCCATTCTTTTTGGCCTCCTGCTCCTAGGTCTGCTCATCTACGTCTCTACAAGCT
CGGCTTCTTCAAACGTTCCCTCCCTACGGCACAGCCATGGAAAAGCTCAGCTCAAGCCTCCAGCCACC
TCAGATGCCTGA
    
```

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

SgfI-MluI

**ACCN:**

NM\_010577

**Insert Size:**

3162 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](mailto: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](#)

**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\\_010577.4](#), [NP\\_034707.5](#)

**RefSeq Size:** 4440 bp

**RefSeq ORF:** 3162 bp

**Locus ID:** 16402

**UniProt ID:** [P11688](#)

**Cytogenetics:** 15 58.9 cM

**Gene Summary:** The product of this gene belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This gene encodes the integrin alpha 5 chain, which is proteolytically processed to generate light and heavy chains that join with beta 1 to form a fibronectin receptor. In addition to adhesion, integrins are known to participate in cell-surface mediated signaling. Integrin alpha 5 and integrin alpha V chains are produced by distinct genes. Homozygous knockout mice for this gene exhibit embryonic lethality. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]  
Transcript Variant: This variant (1) represents the shorter transcript and encodes the longer isoform (1).