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Product datasheet for SC301011

Integrin beta 4 (ITGB4) (NM_001005731) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Integrin beta 4 (ITGB4) (NM_001005731) Human Untagged Clone

Tag: Tag Free

Symbol: ITGB4

Synonyms: CD104; GP150

Vector: pCMV6 series

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001005731, the custom clone sequence may differ by one or more nucleotides

ATGGCAGGGCCACGCCCCAGCCCATGGGCCAGGCTGCTCCTGGCAGCCTTGATCAGCGTC
AGCCTCTCTGGGACCTTGGCAAACCGCTGCAAGAAGGCCCCAGTGAAGAGCTGCACGGAG
TGTGTCCGTGTGGATAAGGACTGCGCCTACTGCACAGACGAGATGTTCAGGGACCGGCGC
TGCAACACCCAGGCGGAGCTGCTGGCCGCGGGCTGCCAGCGGGAGAGCATCGTGGTCATG
GAGAGCAGCTTCCAAATCACAGAGGAGACCCAGATTGACACCACCCTGCGGCGCAGCCAG
ATGTCCCCCCAAGGCCTGCGGGTCCGTCTGCGGCCCGGTGAGGAGCGGCATTTTGAGCTG
GAGGTGTTTGAGCCACTGGAGAGCCCCGTGGACCTGTACATCCTCATGGACTTCTCCAAC
TCCATGTCCGATGATCTGGACAACCTCAAGAAGATGGGGCAGAACCTGGCTCGGGTCCTG
AGCCAGCTCACCAGCGACTACACTATTGGATTTGGCAAGTTTGTGGACAAAGTCAGCGTC
CCGCAGACGGACATGAGGCCTGAGAAGCTGAAGGAGCCCTGGCCCAACAGTGACCCCCCC
TTCTCCTTCAAGAACGTCATCAGCCTGACAGAAGATGTGGATGAGTTCCGGAATAAACTG
CAGGGAGAGCGGATCTCAGGCAACCTGGATGCTCCTGAGGGCGGCTTCGATGCCATCCTG
CAGACAGCTGTGTGCACGAGGGACATTGGCTGGCGCCCGGACAGCACCCACCTGCTGGTC
TTCTCCACCGAGTCAGCCTTCCACTATGAGGCTGATGGCGCCAACGTGCTGGCTGGCATC
ATGAGCCGCAACGATGAACGGTGCCACCTGGACACCACGGGCACCTACACCCAGTACAGG
ACACAGGACTACCCGTCGGTGCCCACCCTGGTGCGCCTGCTCGCCAAGCACAACATCATC
CCCATCTTTGCTGTCACCAACTACTCCTATAGCTACTACGAGAAGCTTCACACCTATTTC
CCTGTCTCCTCACTGGGGGTGCTGCAGGAGGACTCGTCCAACATCGTGGAGCTGCTGGAG
GAGGCCTTCAATCGGATCCGCTCCAACCTGGACATCCGGGCCCTAGACAGCCCCCGAGGC
CTTCGGACAGAGGTCACCTCCAAGATGTTCCAGAAGACGAGGACTGGGTCCTTTCACATC
CGGCGGGGGGAAGTGGGTATATACCAGGTGCAGCTGCGGGCCCTTGAGCACGTGGATGGG
ACGCACGTGTGCCAGCTGCCGGAGGACCAGAAGGGCAACATCCATCTGAAACCTTCCTTC
TCCGACGGCCTCAAGATGGACGCGGGCATCATCTGTGATGTGTGCACCTGCGAGCTGCAA
AAAGAGGTGCGGTCAGCTCGCTGCAGCTTCAACGGAGACTTCGTGTGCGGACAGTGTGTG
TGCAGCGAGGGCTGGAGTGGCCAGACCTGCAACTGCTCCACCGGCTCTCTGAGTGACATT
CAGCCCTGCCTGCGGGAGGGCGAGGACAAGCCGTGCTCCGGCCGTGGGGAGTGCCAGTGC
GGGCACTGTGTGTGCTACGGCGAAGGCCGCTACGAGGGTCAGTTCTGCGAGTATGACAAC
TTCCAGTGTCCCCGCACTTCCGGGTTCCTCTGCAATGACCGAGGACGCTGCTCCATGGGC
CAGTGTGTGTGTGAGCCTGGTTGGACAGGCCCAAGCTGTGACTGTCCCCTCAGCAATGCC

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ACCTGCATCGACAGCAATGGGGGCATCTGTAATGGACGTGGCCACTGTGAGTGTGGCCGC
TGCCACTGCCACCAGCAGTCGCTCTACACGGACACCATCTGCGAGATCAACTACTCGGCG
ATCCACCCGGGCCTCTGCGAGGACCTACGCTCCTGCGTGCAGTGCCAGGCGTGGGGCACC
GGCGAGAAGAAGGGGCGCACGTGTGAGGAATGCAACTTCAAGGTCAAGATGGTGGACGAG
CTTAAGAGAGCCGAGGAGGTGGTGGTGCGCTGCTCCTTCCGGGACGAGGATGACGACTGC
ACCTACAGCTACACCATGGAAGGTGACGGCGCCCCTGGGCCCAACAGCACTGTCCTGGTG
CACAAGAAGAAGGACTGCCCTCCGGGCTCCTTCTGGTGGCTCATCCCCCTGCTCCTCCTC
CTCCTGCCGCTCCTGGCCCTGCTACTGCTGCTATGCTGGAAGTACTGTGCCTGCTGCAAG
GCCTGCCTGGCACTTCTCCCGTGCTGCAACCGAGGTCACATGGTGGGCTTTAAGGAAGAC
CACTACATGCTGCGGGAGAACCTGATGGCCTCTGACCACTTGGACACGCCCATGCTGCGC
AGCGGGAACCTCAAGGGCCGTGACGTGGTCCGCTGGAAGGTCACCAACAACATGCAGCGG
CCTGGCTTTGCCACTCATGCCGCCAGCATCAACCCCACAGAGCTGGTGCCCTACGGGCTG
TCCTTGCGCCTGGCCCGCCTTTGCACCGAGAACCTGCTGAAGCCTGACACTCGGGAGTGC
GCCCAGCTGCGCCAGGAGGTGGAGGAGAACCTGAACGAGGTCTACAGGCAGATCTCCGGT
GTACACAAGCTCCAGCAGACCAAGTTCCGGCAGCAGCCCAATGCCGGGAAAAAGCAAGAC
CACACCATTGTGGACACAGTGCTGATGGCGCCCCGCTCGGCCAAGCCGGCCCTGCTGAAG
CTTACAGAGAAGCAGGTGGAACAGAGGGCCTTCCACGACCTCAAGGTGGCCCCCGGCTAC
TACACCCTCACTGCAGACCAGGACGCCCGGGGCATGGTGGAGTTCCAGGAGGGCGTGGAG
CTGGTGGACGTACGGGTGCCCCTCTTTATCCGGCCTGAGGATGACGACGAGAAGCAGCTG
CTGGTGGAGGCCATCGACGTGCCCGCAGGCACTGCCACCCTCGGCCGCCGCCTGGTAAAC
ATCACCATCATCAAGGAGCAAGCCAGAGACGTGGTGTCCTTTGAGCAGCCTGAGTTCTCG
GTCAGCCGCGGGGACCAGGTGGCCCGCATCCCTGTCATCCGGCGTGTCCTGGACGGCGGG
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GTCCAGCTCAGCAACCCTAAGTTTGGGGCCCACCTGGGCCAGCCCCACTCCACCACCATC
ATCATCAGGGACCCAGATGAACTGGACCGGAGCTTCACGAGTCAGATGTTGTCATCACAG
CCACCCCCTCACGGCGACCTGGGCGCCCCGCAGAACCCCAATGCTAAGGCCGCTGGGTCC
AGGAAGATCCATTTCAACTGGCTGCCCCCTTCTGGCAAGCCAATGGGGTACAGGGTAAAG
TACTGGATTCAGGGTGACTCCGAATCCGAAGCCCACCTGCTCGACAGCAAGGTGCCCTCA
GTGGAGCTCACCAACCTGTACCCGTATTGCGACTATGAGATGAAGGTGTGCGCCTACGGG
GCTCAGGGCGAGGGACCCTACAGCTCCCTGGTGTCCTGCCGCACCCACCAGGAAGTGCCC
AGCGAGCCAGGGCGTCTGGCCTTCAATGTCGTCTCCTCCACGGTGACCCAGCTGAGCTGG
GCTGAGCCGGCTGAGACCAACGGTGAGATCACAGCCTACGAGGTCTGCTATGGCCTGGTC
AACGATGACAACCGACCTATTGGGCCCATGAAGAAAGTGCTGGTTGACAACCCTAAGAAC
CGGATGCTGCTTATTGAGAACCTTCGGGAGTCCCAGCCCTACCGCTACACGGTGAAGGCG
CGCAACGGGGCCGGCTGGGGGCCTGAGCGGGAGGCCATCATCAACCTGGCCACCCAGCCC
AAGAGGCCCATGTCCATCCCCATCATCCCTGACATCCCTATCGTGGACGCCCAGAGCGGG
GAGGACTACGACAGCTTCCTTATGTACAGCGATGACGTTCTACGCTCTCCATCGGGCAGC
CAGAGGCCCAGCGTCTCCGATGACACTGAGCACCTGGTGAATGGCCGGATGGACTTTGCC
TTCCCGGGCAGCACCAACTCCCTGCACAGGATGACCACGACCAGTGCTGCTGCCTATGGC
ACCCACCTGAGCCCACACGTGCCCCACCGCGTGCTAAGCACATCCTCCACCCTCACACGG
GACTACAACTCACTGACCCGCTCAGAACACTCACACTCGACCACACTGCCCAGGGACTAC
TCCACCCTCACCTCCGTCTCCTCCCACGACTCTCGCCTGACTGCTGGTGTGCCCGACACG
CCCACCCGCCTGGTGTTCTCTGCCCTGGGGCCCACATCTCTCAGAGTGAGCTGGCAGGAG
CCGCGGTGCGAGCGGCCGCTGCAGGGCTACAGTGTGGAGTACCAGCTGCTGAACGGCGGT
GAGCTGCATCGGCTCAACATCCCCAACCCTGCCCAGACCTCGGTGGTGGTGGAAGACCTC
CTGCCCAACCACTCCTACGTGTTCCGCGTGCGGGCCCAGAGCCAGGAAGGCTGGGGCCGA
GAGCGTGAGGGTGTCATCACCATTGAATCCCAGGTGCACCCGCAGAGCCCACTGTGTCCC
CTGCCAGGCTCCGCCTTCACTTTGAGCACTCCCAGTGCCCCAGGCCCGCTGGTGTTCACT
GCCCTGAGCCCAGACTCGCTGCAGCTGAGCTGGGAGCGGCCACGGAGGCCCAATGGGGAT
ATCGTCGGCTACCTGGTGACCTGTGAGATGGCCCAAGGAGGAGGGCCAGCCACCGCATTC

CGGGTGGATGGAGACAGCCCCGAGAGCCGGCTGACCGTGCCGGGCCTCAGCGAGAACGTG
CCCTACAAGTTCAAGGTGCAGGCCAGGACCACTGAGGGCTTCGGGCCAGAGCGCGAGGGC
ATCATCACCATAGAGTCCCAGGATGGAGGACCCTTCCCGCAGCTGGGCAGCCGTGCCGGG
CTCTTCCAGCACCCGCTGCAAAGCGAGTACAGCAGCATCACCACCACCCACACCAGCGCC
ACCGAGCCCTTCCTAGTGGATGGGCTGACCCTGGGGGCCCAGCACCTGGAGGCAGGCGGC
TCCCTCACCCGGCATGTGACCCAGGAGTTTGTGAGCCGGACACTGACCACCAGCGGAACC
CTTAGCACCCACATGGACCAACAGTTCTTCCAAACTTGA

Restriction Sites: Please inquire

ACCN: NM_001005731

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001005731.1, NP_001005731.1

RefSeq Size: 5715 bp

RefSeq ORF: 5259 bp

Locus ID: 3691

UniProt ID: P16144

Cytogenetics: 17q25.1

Protein Families: Druggable Genome

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Regulation of actin cytoskeleton

Gene Summary: Integrins are heterodimers comprised of alpha and beta subunits, that are noncovalently associated transmembrane glycoprotein receptors. Different combinations of alpha and beta polypeptides form complexes that vary in their ligand-binding specificities. Integrins mediate cell-matrix or cell-cell adhesion, and transduced signals that regulate gene expression and cell growth. This gene encodes the integrin beta 4 subunit, a receptor for the laminins. This subunit tends to associate with alpha 6 subunit and is likely to play a pivotal role in the biology of invasive carcinoma. Mutations in this gene are associated with epidermolysis bullosa with pyloric atresia. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (3) lacks an in-frame exon in the coding region, as compared to variant 1. The encoded isoform 3 thus lacks an internal segment, as compared to isoform 1.