

Product datasheet for MC223966

Itsn1 (NM_001110275) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Itsn1 (NM_001110275) Mouse Untagged Clone
Tag: Tag Free
Symbol: Itsn1
Synonyms: AA517634; AA545208; AI316805; AI839402; AI848451; Ehsh1; Ese1; Itsn; Sh3p17
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223966 representing NM_001110275
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGGCTCAGTTTCCACACCTTTTCGGTGGTAGCCTGGATGCTCTGGGCCATAACTGTGGAGAAAGGGCCA
 AGCATGACCAGCAGTTTCTTAGCCTGAAGCCGATAGCGGGATTTACTGCTGATCAAGCGAGGAACTT
 TTTTTTCCAATCTGGGTTACCTCAGCCTGTCTTAGCACAATATGGGCGTAGCGGACATGAATAACGAT
 GGAAGGATGGATCAAGTGAATTTTCCATAGCCATGAAGCTTATCAAAGTGAAGCTACAAGGATATCAGC
 TCCCTCCACACTTCCCCTGTCATGAAACAGCAACCAGTGGCTATTTCCAGTGCACCAGCATTTGGTAT
 AGGAGGGATTGCTAGCATGCCACCACTCACAGCTGTTGCTCCTGTGCCAATGGGCTCCATTCAGATTGTT
 GGAATGTCTCCACCCTTAGTATCTTCTGTCCCTCCAGCAGCAGTGCCTCCCTGGCTAACGGGGCTCCTC
 CCGTCATACAGCCTCTGCCTGCGTTTGGCATCCTGCAGCCACATTGCCAAAGAGTTCTTCTCAGCAG
 ATCTGGTCCAGGGTCACAATTAACACTAAGTTACAGAAGGCACAATCATTGATGTCGCCAGCGCCCT
 CCAGCAGCAGAAATGGGCTGTGCCTCAGTCATCAAGGCTGAAATACAGGCAGTTATTCAACAGCCACGACA
 AAACATGAGTGGACACTTAACAGGTCCCAGGCAAGAATACTCATGCAATCAAGTTTACCCAGG
 TCAGCTGGCTTCAATATGGAATCTTCTGACATTGATCAAGATGGAAAACACTGCAGAGAAGAAATTTATC
 CTAGCTATGCACCTAATTGATGTTGCCATGTCTGGTCAGCCACTGCCGCCGTCCTGCCTCCAGAATACA
 TCCCTCCTTCTCAGAAGAGTTCGCTCCGGCAGTGGGATGTCCGTCATAAGCTCTTCTTGTGGATCA
 GAGGCTGCCTGAGGAGCCGTCGTCAGAGGATGAGCAGCAGCCAGAGAAGAAACTGCCTGTGACATTTGAA
 GATAAAGAAGCGGGAGAATTCGAGCGAGGCAGTGTGGAGCTGGAGAAGCGCCCAAGCGCTCTTGGAGC
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 CGTGGTCTGAAGCAAGGAGGAAGACTCTGGAGTTTGTAGTTAGAAGCTCTGAATGACAAAAGCATCAG
 CTAGAAGGAAAATTCAGGATATCAGGTGTCGACTGGCAACCCAGAGGCAAGAAATTGAGAGCACGAAACA



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AGTCTAGAGAGCTAAGAATTGCTGAAATCACCCACTTACAGCAGCAGTTGCAGGAATCTCAGCAAATGCT
TGGAAGACTTATTCCAGAGAAACAGATACTCAGTGACCAGTTAAAACAAGTCCAGCAGAACAGTTTGCAT
AGAGACTCGCTTCTTACCCTCAAAGAGCCTTGGAAAGCAAAGGAGCTGGCCCGGCAGCAGCTCCGGGAGC
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GGAAGTGGAGAGATACATAGCAAACAGCAACTCCAGAAGCAGAGGTCCCTGGAGGCAGCGCAGCTGAAG
CAGAAAAGAGCAGGAGAGGAAGAGCCTGGAGTTAGAGAAGCAAAAGGAAGACGCTCAGAGACGAGTTCAGG
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GGACAGACTGAAGAGGGAAGACAGTGTGAGGAAGAAGGAGGCGGAAGAGAGAGCCAAAGCCGGAAATGCAA
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CCACAGAGAAAGGCCCGCTTACCATTTCTGCACAGGAGAGTGTAAAAGTGGTATATTACCAGCGCTGTA
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CCCCAACTGGCTCTGCGTGAGACCCCTGCTCCTTTGCCAGTGACCTCTTCTGAGCCCTCCACAACCC
AACAACTGGGCAGACTTCAGTTCACGTGGCCAGCAGCTCAAACGAGAAGCCAGAAAACGGACAAGTGGG
ATACATGGGCGGCTCAGCCTTCTGACCGTACCTAGTGTGGCCAGTTACGGCAGAGATCAGCCTTTAC
CCCAGCCACAGCCACTGGCTCCTCCCATCTCCCGTCTGGGCCAGGGTAAAAGGTGGAAGGGCTACAA
GCGCAAGCCCTGTATCCCTGGAGAGCCAAAAAGACAACCACTTAAATTTTAAACAAAAGTGACGTATCA
CCGTTCTGGAACAGCAAGACATGTGGTGGTTTGGAGAAGTTCAAGGTGAGAAGGGTTGGTTCCTCAAGTC
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GCTAGTCTAAAGAGAGTGGCTTCCCGGCCGCAAGCCAGCCATCCCGGAGAAGAGTTTATTGCCATGT
ACACATACGAGAGTCTGAGCAAGGAGATTTAACCTTTTCCAGCAAGGGGATGTGATTGTGGTTACCAAGAA
AGATGGTACTGGTGGACGGGAACGGTGGGCGACAAGTCCGGAGTCTTCCCTTCTAACTATGTGAGGCTT
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CCGCAAGTGCAGCCAGCAGTGTGCCAGGTGATCGGGATGTACGATTACACCGCCAGAACGATGACGAACT
AGCCTTCAGCAAAGGCCAGATCATCAACGCTCTCAACAAGGAGGACCCGGACTGGTGGAAAGGAGAAGTC
AGTGGCAAGTTGGGCTTCCCATCAATTATGTAAGCTGACCACAGACATGGACCCAGCCAGCAAT
GA
    
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ACGGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-MluI

ACCN:

NM_001110275

Insert Size:

3642 bp

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).

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:	<ol style="list-style-type: none">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:	<u>NM_001110275.1, NP_001103745.1</u>
RefSeq Size:	5386 bp
RefSeq ORF:	3642 bp
Locus ID:	16443
UniProt ID:	<u>Q9Z0R4</u>
Cytogenetics:	16 C4
Gene Summary:	<p>Adapter protein that provides a link between the endocytic membrane traffic and the actin assembly machinery (PubMed:10064583). Acts as guanine nucleotide exchange factor (GEF) for CDC42, and thereby stimulates actin nucleation mediated by WASL and the ARP2/3 complex (By similarity). Plays a role in the assembly and maturation of clathrin-coated vesicles (By similarity). Recruits FCHSD2 to clathrin-coated pits (By similarity). Involved in endocytosis of activated EGFR, and probably also other growth factor receptors (PubMed:16914641). Involved in endocytosis of integrin beta-1 (ITGB1) and transferrin receptor (TFR); internalization of ITGB1 as DAB2-dependent cargo but not TFR may involve association with DAB2 (By similarity). Promotes ubiquitination and subsequent degradation of EGFR, and thereby contributes to the down-regulation of EGFR-dependent signaling pathways (PubMed:16914641). In chromaffin cells, required for normal exocytosis of catecholamines (PubMed:18676989). Required for rapid replenishment of release-ready synaptic vesicles at presynaptic active zones (PubMed:23633571). Inhibits ARHGAP31 activity toward RAC1 (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) has multiple differences in the presence and absence of exons at its 3' end, compared to variant 1. These differences produce a unique 3' UTR and result in a protein (isoform 2) that is shorter at the C-terminus, compared to isoform 1.</p>