

Product datasheet for MC224855

Itsn1 (NM_010587) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Itsn1 (NM_010587) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Itsn1
Synonyms:	AA517634; AA545208; AI316805; AI839402; AI848451; Ehsh1; Ese1; Itsn; Sh3p17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224855 representing NM_010587 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCAGTTTCCACACCTTTTCGGTGGTAGCCTGGATGCTGGGCCATAACTGTGGAGGAAAGGGCCA
AGCATGACCAGCAGTTTCCTTAGCCTGAAGCCGATAGCGGGATTTACTGCTGATCAAGCGAGGAACTT
TTTTTCCAATCTGGTTACCTCAGCCTGTCTTAGCACAAATATGGGCGCTAGCGGACATGAATAACGAT
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AGGAGGGATTGCTAGCATGCCACCACTCACAGCTGTTGCTCCTGTGCCAATGGGCTCCATTCCAGTTGTT
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TCAGCTGGCTTCAATATGGAATCTTTCTGACATTGATCAAGATGGAAACTCACTGCAGAAGAATTTATC
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GATAAGAAGCGGGAGAATTCGAGCGAGGCAGTGTGGAGCTGGAGAAGCGCCGCAAGCGCTCTTGAGC
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GACAACTTGAATGGGAACGGAACCGGAGACAGGAATCCTGAATCAGAGGAACAAGGAGCAGGAGGGCAC
CGTGGTCTGAAGCAAGGAGGAAGACTCTGGAGTTTGAAGCTCTGAATGACAAAAGCATCAG



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CTAGAAGGAAAACCTTCAGGATATCAGGTGTCGACTGGCAACCCAGAGGCAAGAAATTGAGAGCACGAACA
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CATGCCCTGGAAGGCGGAGGAGCTATGCTCCAGGTGAACGAGGAGTTTCGAGAGAAGGAGAACTCAG
ACCGGCTGGAGTGGATCCAAGCCACGTGCAGTGTGAAGGCCCTTCTGAGCAACTGGTGTCAATTCACT
GACCAACTGCTTGGGACCACGCAAGTTTCTGCACAGCGGGAAGCTCTACAAGGCCAAGAGCAACAAAGAA
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CCGACAAAGTCTTCCAGCCCCAAATCAACCTTCAGTATAAAATGTACAAAACGCCCATTTTCTTAAATGA
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TGAGAGGGACAGTTCTCGCCTGATGATTTTTTGGGTGGACAGAGATCCGAGTGGCCGACATCAAGAAA
GACCAGGGCTCCAAGGGGCCGTTACGAAGTGTCTCCTGCTGCATGAGGTCCCCACGGGAGAGATTGTGG

TCCGCCTTGACCTGCAGTTGTTTGATGAGCCGTAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_010587
Insert Size:	5145 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:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_010587.2, NP_034717.2</u>
RefSeq Size:	13976 bp
RefSeq ORF:	5145 bp
Locus ID:	16443
UniProt ID:	<u>Q9Z0R4</u>
Cytogenetics:	16 C4

Gene Summary:

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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence data because no single transcript from the same strain was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.