

## Product datasheet for **SC319381**

### Mucolipin 1 (MCOLN1) (NM\_020533) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mucolipin 1 (MCOLN1) (NM_020533) Human Untagged Clone
Tag:	Tag Free
Symbol:	Mucolipin 1
Synonyms:	MG-2; ML1; ML4; MLIV; MST080; MSTP080; TRP-ML1; TRPM-L1; TRPML1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_020533.1  
 ATCAGCTGATGCCGGAGGGTTTGAAGCCGCGCCGCGAGGGAGCGAGGTCGCGAGTGACAGC  
 GGCGGGCGATCGGACCCAGGCTGCCCGCCGTACCCGCCTGCGTCCCAGCGCTCCCGCCCC  
 AGCATGACAGCCCCGGCGGGTCCGCGCGGCTCAGAGACCGAGCGGCTTCTGACCCCCAAC  
 CCCGGGTATGGGACCCAGGCGGGCCTTACCCGCCCTCCGACACCCCCAGAAGAGGAA  
 GACCTTCGCGCTGCTCAAATACTTTTTTCATGAGTCCCTGCGACAAGTTTCGAGCCAAG  
 GGCCGCAAGCCCTGCAAGCTGATGCTGCAAGTGGTCAAGATCCTGGTGGTCACGGTGCAG  
 CTCATCCTGTTTGGGCTCAGTAATCAGCTGGCTGTGACATTCCGGGAAGAGAACCACATC  
 GCCTTCCGACACCTTCTCTGCTGGGCTACTCGGACGGAGCGGATGACACCTTCGACGCC  
 TACACGCGGGAGCAGCTGTACCAGGCCATCTCCATGCTGTGGACCAGTACCTGGCGTTG  
 CCTGACGTGTCACTGGGCGGTATGCGTATGTCCGTGGTGGGGTGACCTTGGACCAAT  
 GGCTCAGGGCTTGTCTCTGCCAGCGTACTACCACCGAGGCCACGTGGACCCGGCCAAC  
 GACACATTTGACATTGATCCGATGGTGGTACTGACTGCATCCAGGTGGATCCCCCGAG  
 CGGCCCTCCGCCCCAGCGACGATCTACCCTCTTGAAAGCAGCTCCAGTTACAAG  
 AACCTCAGCTCAAATCCACAAGCTGGTCAATGTCACCATCCACTTCCGGCTGAAGACC  
 ATTAACCTCCAGAGCCTCATCAATAATGAGATCCCGACTGCTATACCTTCAGCGTCCTG  
 ATCACGTTTGACAACAAAGCACACAGTGGGCGGATCCCCATCAGCCTGGAGACCCAGGCC  
 CACATCCAGGAGTGAAGCACCCAGTGTCTTCCAGCACGGAGACAACAGCTTCCGGCTC  
 CTGTTTGACGTGGTGGTCACTCACCTGCTCCCTGTCTTCTCTCTGCGCCCGCTCA  
 CTCCTTCGAGGCTTCTGCTGCAGAACGAGTTTGTGGGGTTCATGTGGCGGCAGCGGGGA  
 CGGGTCATCAGCCTGTGGGAGCGGCTGGAATTTGTCAATGGTGGTACATCCTGCTGTC  
 ACCAGCGATGTGCTCACCATCTCGGGCACCATCATGAAGATCGGCATCGAGGCCAAGAAC  
 TTGGCGAGCTACGACGTCTGCAGCATCCTCCTGGGCACCTCGACGCTGCTGGTGTGGTG  
 GGCGTGATCCGCTACCTGACCTTCTTCCACAACATAAATATCCTCATCGCCACACTGCGG  
 GTGGCCCTGCCAGCGTATGCGCTTCTGCTGCTGCGTGGCTGTATCTACCTGGGCTAC  
 TGCTTCTGTGGTGGATCGTGTGGGGCCATCATGTGAAGTTCGCTCACTCTCCATG  
 GTGTCTGAGTGCCTGTTCTCGCTCATCAATGGGGACGACATGTTTGTGACGTTCCGCCG  
 ATGCAGGCGCAGCGGGCCGAGCAGCCTGGTGTGGCTTCTTCCAGCTCTACCTTTAC  
 TCCTTCATCAGCCTTTCATCTACATGGTGTCTCAGCCTTTCATCGCGCTCATCACCGGC  
 GCCTACGACACCATCAAGCATCCCGCGGCGCAGGCGCAGAGGAGAGCGAGCTGCAGGCC  
 TACATCGCACAGTGCCAGGACAGCCCCACCTCCGGCAAGTTCGCGCGGGAGCGGCTCG  
 GCCTGCAGCCTTCTCTGCTGCTGCGGAAGGACCCTCCGAGGAGCATTGCTGCTGGTG  
 AATTGATTCGACCTGACTGCCGTTGGACCGTAGGCCCTGGACTGCAGAGACCCCCGCCCC  
 CGACCCCGCTTATTTATTTGTAGGGTTTGTCTTTAAGGATCGGCTCCCTGTGCGGCCGA  
 GGAGGGCTGGACCTTTCGTGTCGGACCTTGGGGCGGGGAGACTGGGTGGGGAGGGTG  
 TTGAATAAAAGGGAAAATAAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** Please inquire

**ACCN:** NM\_020533

**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\\_020533.1](#), [NP\\_065394.1](#)

**RefSeq Size:** 2051 bp

**RefSeq ORF:** 1743 bp

**Locus ID:** 57192

**UniProt ID:** [Q9GZU1](#)

**Cytogenetics:** 19p13.2

**Domains:** ion\_trans

**Protein Families:** Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane

**Gene Summary:** This gene encodes a member of the transient receptor potential (TRP) cation channel gene family. The transmembrane protein localizes to intracellular vesicular membranes including lysosomes, and functions in the late endocytic pathway and in the regulation of lysosomal exocytosis. The channel is permeable to Ca(2+), Fe(2+), Na(+), K(+), and H(+), and is modulated by changes in Ca(2+) concentration. Mutations in this gene result in mucopolipidosis type IV. [provided by RefSeq, Oct 2009]