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Product datasheet for SC125333

Actin (ACTA1) (NM_001100) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Actin (ACTA1) (NM_001100) Human Untagged Clone
Tag:	Tag Free
Symbol:	Actin
Synonyms:	ACTA; ASMA; CFTD; CFTD1; CFTDM; MPFD; NEM1; NEM2; NEM3; SHPM
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001100, the custom clone sequence may differ by one or more nucleotides

ATGTGCGACGAAGACGAGACCACCGCCCTCGTGTGCGACAATGGCTCCGGCCTGGTGAAAGCCGGCTTCG
CCGGGGATGACGCCCCTAGGGCCGTGTTCCCGTCCATCGTGGGCCGCCCCCGACACCAGGGCGTCATGGT
CGGTATGGGTCAGAAAGATTCCTACGTGGGCGACGAGGCTCAGAGCAAGAGAGGTATCCTGACCCTGAAG
TACCCTATCGAGCACGGCATCATCACCAACTGGGATGACATGGAGAAGATCTGGCACCACACCTTCTACA
ACGAGCTTCGCGTGGCTCCCGAGGAGCACCCCACCCTGCTCACCGAGGCCCCCCTCAATCCCAAGGCCAA
CCGCGAGAAGATGACCCAGATCATGTTTGAGACCTTCAACGTGCCCGCCATGTACGTGGCCATCCAGGCC
GTGCTGTCCCTCTACGCCTCCGGCAGGACCACCGGCATCGTGCTGGACTCCGGCGACGGCGTCACCCACA
ACGTGCCCATTTATGAGGGCTACGCGCTGCCGCACGCCATCATGCGCCTGGACCTGGCGGGCCGCGATCT
CACCGACTACCTGATGAAGATCCTCACTGAGCGTGGCTACTCCTTCGTGACCACAGCTGAGCGCGAGATC
GTGCGCGACATCAAGGAGAAGCTGTGCTACGTGGCCCTGGACTTCGAGAACGAGATGGCGACGGCCGCCT
CCTCCTCCTCCCTGGAAAAGAGCTACGAGCTGCCAGACGGGCAGGTCATCACCATCGGCAACGAGCGCTT
CCGCTGCCCGGAGACGCTCTTCCAGCCCTCCTTCATCGGTATGGAGTCGGCGGGCATTCACGAGACCACC
TACAACAGCATCATGAAGTGTGACATCGACATCAGGAAGGACCTGTATGCCAACAACGTCATGTCGGGGG
GCACCACGATGTACCCTGGGATCGCTGACCGCATGCAGAAAGAGATCACCGCGCTGGCACCCAGCACCAT
GAAGATCAAGATCATCGCCCCGCCGGAGCGCAAATACTCGGTGTGGATCGGCGGCTCCATCCTGGCCTCG
CTGTCCACCTTCCAGCAGATGTGGATCACCAAGCAGGAGTACGACGAGGCCGGCCCTTCCATCGTCCACC
GCAAATGCTTCTAG

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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_001100 unedited
AATACGACTCACTATAGGGCGGCCGCGAATTCGGCCATTACGGCCGGGGACCGCAGCGGA
CAGCGCCAAGTGAAGCCTCGCTTCCCTCCCGCGGCGACCAGGGCCCGAGCCGAGAGTAGC
AGTTGTAGCTACCCGCCCAGAAACTAGACACAATGTGCGACGAAGACGAGACCACCGCCC
TCGTGTGCGACAATGGCTCCGGCCTGGTGAAAGCCGGCTTCGCCGGGGATGACGCCCCTA
GGGCCGTGTTCCCGTCCATCGTGGGCCGCCCCCGACACCAGGGCGTCATGGTCGGTATGG
GTCAGAAAGATTCCTACGTGGGCGACGAGGCTCAGAGCAAGAGAGGTATCCTGACCCTGA
AGTACCCTATCGAGCACGGCATCATCACCAACTGGGATGACATGGAGAAGATCTGGCACC
ACACCTTCTACAACGAGCTTCGCGTGGCTCCCGAGGAGCACCCCACCCTGCTCACCGAGG
CCCCCCTTCATCCCAAGGCCAACCGCGAGAAGATGACCAGATCATGTTTGGACCTTCACG
TGCCGCATGTACTGGCATCAAGCGTGGTGGCCTTTAGGCTTCGAGACAACCGTTTGGGTT
GATCGGGCAGGCGTACCCCACGTGCCATTATGAGCTAGCGTTGCGAGCATTTGCCTGACT
GCGGCGGTTTACGATCTGTAATACTATGACGGTTC
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Restriction Sites: Please inquire

ACCN: NM_001100

Insert Size: 1600 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 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_001100.3, NP_001091.1

RefSeq Size: 1509 bp

RefSeq ORF: 1134 bp

Locus ID: 58

UniProt ID: P68133

Cytogenetics:	1q42.13
Domains:	ACTIN
Protein Families:	Stem cell - Pluripotency
Gene Summary:	The product encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, while beta and gamma actins are involved in the regulation of cell motility. This actin is an alpha actin that is found in skeletal muscle. Mutations in this gene cause a variety of myopathies, including nemaline myopathy, congenital myopathy with excess of thin myofilaments, congenital myopathy with cores, and congenital myopathy with fiber-type disproportion, diseases that lead to muscle fiber defects with manifestations such as hypotonia. [provided by RefSeq, Sep 2019]