

Product datasheet for MC223232

Smarcad1 (NM_007958) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarcad1 (NM_007958) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Smarcad1
Synonyms:	AV081750; AW226546; D6Pas1; Etl1; mKIAA1122
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223232 representing NM_007958 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCTTTCAACTTGGACCGTTTTTCGCTTTGAGAAAAGGAGTAAGATTGAGGAAGCACCCGAAGCAG
CCCCTCAGCCCTCCAGGCCCGTCTTCGTCACCAATTTCTCTTAGTGCTGAAGAGGAGAATGCTGAAGG
GGAAGGTAGCAGGGCAAACACCCAGACTCAGATGTAAGTGAAGAAACAGAAAGATTCTAGTGTCCAGAA
CCGCCAGACAATGAAAGAAAAGCAAGTTTATCATGTTTCCAAAATCAAAGAGCAATACAGGAATATATTG
ATTTATCATCTGATACTGAAGATGTTTTCCAAAATGTTCCAGTACAGTTCAAGAGAAAAAATTCAGCAA
AGACACAGTGATTATAGTTTCAGAGCCATCTGAAGATGAAGAATCCCATGACCTTCCTTCTGTTACACGA
AGAAATGACAGTTCAGAACTGGAAGACCTTTCAGAAATGGAAGATCTTAAAGATGCTAAGCTTCAGACAT
TGAAGGAACTGTTTCCACAAAGAAGTGACAGTGATCTTCTAAAGTTGATTGAATCAACAAGCACTATGGA
TGGAGCCATTGCTGCTGCCTTCTGATGTTTGGTATGCAGGTGGTGGACCCAGGAAAAGGAAATATCT
TCTTCTTCTGAGGAGGATGACGTTAATGATGATCAGTCTGTAACAGCCGCGAGGGGACCGTGGAGAAG
AATCAAATGAGTCTGCAGAAGCCAGCAGCACTGGGAAAAGCAAGAAAGTATTGTGTTGAAATGCAAAA
GGAATTTCCAAATTTTGATAAACAGGAATTAAGAGAAGTGCTTAAAGGAGCATGAGTGGATGTACACAGAA
GCCTTGGAGTCTCTGAAAGTGTTCGCGAAGATCAAGACGTGCAGTGTGCTTACAAAAGTGAAGTTACAA
ATGAAAAGAAAGTTGCAAGGAATCAAAATATTCTAAAAATGCAACTAAAATAAAAATGAAACAGAAAAAT
TTCCGTGAAACCACAAAATGGCTTTAACAAGAAACGTAAGAAAAATGATTTAATCCTAAGAAAAGCCGTA
GAGGACTCTGAGTACGATTACAGTTCTGATGCTGGGAGCTCACTGGATGAGGACTATAGCAGTTGTGAAG
AAGTGATGGAGGACGGCTATAAAGGCAAAATCTTCATTTCTTCAAGTTTCTTCAATTGCTGAAGTAC
TTTGATTCTAAGTGTCTCAGAAAAGGCTCAGAAAATAACAGAACTCCGGCCCTTAAATAATTGGGAA
GCTCTGTTTACAAAGATGTCTAAAATCAATGGCCTATCTGAAGATTTGATATGGAATTGCAAAACGGTAA
TTCAAGAAAGGGACGTAGTTATAAGACTTATGAACAAATGTGAGGACATTTCAAATAAACTGACCAAAACA
AGTTACGATGCTCACCGGAATGGAGGCGGATGGAACAGAGAACAGCCCTCCCTTCTAAACCAAAGTTTG
TCACTCAAGCCCTATCAGAAGGTTGGGTTGAAGTGGCTGGCGTTGGTGCATAAGCATGGACTTAATGGCA



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TTCTGGCAGACGAAATGGGCCTAGGAAAAACCATTCAAGCCATTGCATTCCTGGCATACCTCTTTCAAGA
 GGGTAATAAAGGGCCTCATTGATTGTTGTTCCAGCCTCCACCATAGATAACTGGTTAAGAGAAGTTAAC
 TTATGGTGCCCGAGTTAAATGTGCTCTGTTACTATGGTTCTCAAGAAGAGCGTAAGCAAATTAGATTCA
 ACATCCATAATAAGTATGAGGATTACAATGTAATTGTTACAACGTATAATTGTGCAATCAGCAGCTCTGA
 TGACCGCAGTCTCTTTGACGACTGAACTGAATTATGCAATTTTGTATGAAGGCCATATGCTGAAGAAT
 ATGGGCTCTATCCGCTATCAACATCTAATGACAATTAATGCACGTAACCGTTTATTGCTCACAGGCACAC
 CTGTGCAGAATAATCTGCTAGAACTCATGTCATTGTTGAATTTTGTATGCCACACATGTTTAGCAGTAC
 CACCAGTGAAATCCGAAGGATGTTTTCTTCTAAAACGAAACCAGCAGACGAGCAGATATATACGAAAAG
 GAGAGAATAGCCACGCGAAGCAAATCATTAAAGCCCTTCATCCTCAGGAGAGTGAAGGAGGAGTTCTTA
 AGCTCCTGCCTCCAAGAAGGATCGGATTGAGCTATGTGCGATGTCAGAGAAGCAGGAGCAGCTCTACTC
 GGGCCTCTTCAACAGATTGAAAAAGTCTATCAACAACCTGGAAAAAACACAGAGATGTGCAATGTCATG
 ATGCAATTGAGAAAAATGGCCAATCACCTTTACTACCCGCCAGTATTACACACCTGAGAACTGAAGG
 AGATGTCTCAGCTAATGCTGAAGGAACCTACGCACTGTGAGGCCAACCTGACCTGATCTTTGAAGACAT
 GGAAGTTATGACAGATTTTGAACTACATGTACTTTGTAACAGTATCAACACATTAATAGTTACCAGTTA
 GACATGGATTTAATTTTAGATTCTGGGAAATCCGAGCCTTAGGATGCATCTTGTCTGAGTTGAAACAGA
 AGGGTGATAGAGTTGATTATTCAGCCAGTTTACCATGATGCTGGATATACTAGAGGTTCTCTTAAAGCA
 TCATCAACATAGGTACCTCCGATTAGATGGAAAGACTCAGATTTCTGAAAGGATTCATCTAATTGATGAG
 TTTAATACAGATATGGATATCTTTGATTTCTCTTGCAACTAAAGCTGGTGGACTAGGAATAAATCTTA
 CTTACAGCAATGTTGTTAATCTCACGACATTGATTGCAATCCATACAATGACAAACAAGCAGAAGACAG
 GTGCCATAGAGTTGGTCAGACTAAAGAAGTATTAGTTATTAATTAATAAGCCAAGGAACATTGAAGAG
 TCCATGCTAAAAATTAACCAACAAAAGTTGAACTAGAGCAAGACATGACCACAGTAGATGAAGCTGATG
 AAGGAAGTATGCCAGCAGATATAGCCACATTACTAAAAACATCAATGGGCCTGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_007958

Insert Size:

3066 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.

RefSeq:

[NM_007958.1](#), [NP_031984.1](#)

RefSeq Size:

5098 bp

RefSeq ORF:

3066 bp

Locus ID: 13990

UniProt ID: [Q04692](#)

Cytogenetics: 6 30.11 cM

Gene Summary: DNA helicase that possesses intrinsic ATP-dependent nucleosome-remodeling activity and is both required for DNA repair and heterochromatin organization. Promotes DNA end resection of double-strand breaks (DSBs) following DNA damage: probably acts by weakening histone DNA interactions in nucleosomes flanking DSBs. Required for the restoration of heterochromatin organization after replication. Acts at replication sites to facilitate the maintenance of heterochromatin by directing H3 and H4 histones deacetylation, H3 'Lys-9' trimethylation (H3K9me3) and restoration of silencing (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) encodes the longest protein (isoform 1). Variants 1 and 5 encode the same protein (isoform 1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.