

Product datasheet for **MC229020**

Smarcad1 (NM_001253392) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarcad1 (NM_001253392) 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



[View online »](#)

Fully Sequenced ORF: >MC229020 representing NM_001253392
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATGGAGCCATTGCTGCTGCCTTGCTGATGTTTGGTATGCAGGTGGTGGACCCAGGAAAAGGAAAT
 TATCTTCTTCTTCTGAGGAGGATGACGTTAATGATGATCAGTCTGTAAAACAGCCGCGAGGGGACCGTGG
 AGAAGAATCAAATGAGTCTGCAGAAGCCAGCAGCAACTGGGAAAAAGCAAGAAAGTATTGTGTTGAAATTG
 CAAAAGGAATTTCCAAATTTTGATAAACAGGAATTAAGAGAAGTGCTTAAGGAGCATGAGTGGATGTACA
 CAGAAGCCTTGGAGTCTCTGAAAGTGTTCGCGAAGATCAAGACGTGCAGTGTGCTTCACAAAGTGAAGT
 TACAAATGGAAAAGAAGTTGCAAGGAATCAAATTTATTCTAAAAATGCAACTAAAATAAAAATGAAACAG
 AAAATTTCCGTGAAACCACAAAATGGCTTTAACAAGAACGTAAGAAAAATGATTTAATCCTAAGAAAG
 CCGTAGAGGACTCTGAGTACGATTCAGGTTCTGATGCTGGGAGCTCACTGGATGAGGACTATAGCAGTTG
 TGAAGAAGTGATGGAGGACGGCTATAAAGGCAAAATTCCTATTTCCTTCAAGTTTCTTCAATTGCTGAA
 CTGACTTTGATTCTAAGTGTTCTCAGAAAAAGGCTCAGAAAAATACAGAACTCCGGCCCTTAATAATT
 GGAAGCTCTGTTTACAAGATGTCTAAAATCAATGGCCTATCTGAAGATTTGATATGGAATTGCAAAAC
 GGTAATTAAGAAAGGGACGTAGTTATAAGACTTATGAACAAATGTGAGGACATTTCAAATAAACTGACC
 AAACAAGTACGATGCTCACCGGAAATGGAGGCGGATGGAACAGAGAACAGCCCTCCCTTCTAAACAAA
 GTTTGTCACTCAAGCCCTATCAGAAGGTTGGGTTGAACTGGTGGCGTTGGTGCATAAGCATGGACTTAA
 TGGCATTCTGGCAGACGAAATGGGCCTAGGAAAAACCATCAAGCCATTGCATTCCTGGCATACTCTTT
 CAAGAGGTAATAAAGGGCCTCATTGATTGTTGTTCCAGCCTCCACCATAGATAACTGGTTAAGAGAAG
 TTAACTTATGGTGCCCCAGTTTAAATGTGCTCTGTTACTATGGTTCTCAAGAAGAGCGTAAGCAAATTAG
 ATTCAACATCCATAATAAGTATGAGGATTACAATGTAATTGTTACAACGATAAATTGTGCAATCAGCAGC
 TCTGATGACCGCAGTCTCTTTCGACGACTGAAACTGAATTATGCAATTTTTGATGAAGGCCATATGCTGA
 AGAATATGGGCTCTATCCGCTATCAACATCTAATGACAATTAATGCACGTAACCGTTTATTGCTCACAGG
 CACACCTGTGCAGAATAATCTGTAGAACTCATGTATTGTTGAATTTTGTATGCCACACATGTTTAGC
 AGTAGCACCAGTGAATCCGAAGGATGTTTTCTTCTAAAACGAAACCAGCAGACGAGCAGAGTATATACG
 AAAAGGAGAGAATAGCCACGCGAAGCAAATCATTAAAGCCCTTCATCCTCAGGAGAGTGAAGGAGGAGGT
 TCTTAAGCTCCTGCCTCCAAGAAGGATCGGATTGAGCTATGTGCGATGTCAGAGAAGCAGGAGCAGCTC
 TACTCGGGCCTCTCAACAGATTGAAAAAGTCTATCAACAACCTGGAAAAAACACAGAGATGTGCAATG
 TCATGATGCAATTGAGAAAAATGGCCAATCACCTTTACTACACCGCCAGTATTACACACCTGAGAACT
 GAAGGAGATGTCTCAGCTAATGTGAAGGAACCTACGCACTGTGAGGCCAACCTGACCTGATCTTTGAA
 GACATGGAAGTTATGACAGATTTTGAACACTACATGTACTTTGTAACAGATCAACACATTAATAGTTACC
 AGTTAGACATGGATTTAATTTTAGATTCTGGGAAATCCGAGCCTTAGGATGCATCTTGTCTGAGTTGAA
 ACAGAAGGGTGATAGAGTTGATATTTCAGCCAGTTTACCATGATGCTGGATATACTAGAGGTTCTCTTA
 AAGCATCATCAACATAGGTACCTCCGATTAGATGGAAAGACTCAGATTTCTGAAAGGATTCATCTAATTG
 ATGAGTTAATACAGATATGGATATCTTTGATTTCTCTTGTCAACTAAAGCTGGTGGACTAGGAATAAA
 TCTTACTTCAGCAAATGTTGTTAATCTCAGCATTGATTGCAATCCATACAATGACAAACAAGCAGAA
 GACAGGTGCCATAGAGTTGGTCAGACTAAAGAAGTATTAGTTATTAATTAATAAGCCAAGGAACCTATTG
 AAGAGTCCATGCTAAAAATTAACCAACAAAAGTTGAAACTAGAGCAAGACATGACCACAGTATAGTGAAGC
 TGATGAAGGAAGTATGCCAGCAGATATAGCCACATTACTAAAAACATCAATGGGCCT**GTGA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001253392
Insert Size: 2511 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).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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_001253392.1, NP_001240321.1</u>
RefSeq Size:	4637 bp
RefSeq ORF:	2511 bp
Locus ID:	13990
UniProt ID:	<u>Q04692</u>
Cytogenetics:	6 30.11 cM
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) lacks an alternate exon which results in the use of a downstream start codon, compared to variant 1. The resulting protein (isoform 2) is shorter when it is compared to isoform 1.</p>