

Product datasheet for **RG208438**

SMARCAD1 (NM_020159) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMARCAD1 (NM_020159) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SMARCAD1
Synonyms:	ADERM; BASNS; ETL1; HEL1; HRZ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208438 representing NM_020159 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCTTTTCAACCTGGACCGTTTTTCGCTTTGAGAAAAGGAATAAGATTGAGGAAGCGCCGAAGCAA
CCCCTCAACCTTCCCAGCCTGGCCCTTCTTACCAATTTCTCTTAGTGCTGAAGAGGAGAATGCTGAAGG
GGAAGTTAGCAGGGCAACACTCCTGATTCAGATATACTGAAAAACAGAAGATTCTAGTGTCCAGAA
ACTCCAGATAATGAAAGAAAAGCAAGTATATCATATTTCAAAAAATCAAAGAGGAATACAGTATATTGATT
TGCTTTCTGATAGTGAAGATGTCGTTTTCCCAAATGCTCCAATACAGTTCAAGAGAAAACATTCACAA
AGATACAGTGATTATAGTTTCTGAGCCATCTGAAGATGAAGAGTCCAAGGCCTTCTACCATGGCACGT
AGAAATGATGATATTTTCAGAAGTGGAAAGACCTTTCGGAATTGGAAGACCTTAAAGATGCTAACTTCAGA
CTTTGAAGGAACCTTTTCCACAAAGAAGTGACAATGATTTACTTAAGTTGATTGAATCAACAAGCACTAT
GGATGGAGCAATTGCTGCTGCCTTGCTGATGTTGGTGATGCAGGTGGTGGGCCAGGAAAAGAAAATTA
TCTTCTTCTTCAGAGCCATATGAGGAAGATGAATTTAATGATGATCAATCTATAAAAAAGACAAGACTGG
ATCATGGAGAGGAATCAAATGAGTCTGCAGAATCTAGCAATAATTGGGAAAAGCAGGAAAGTATTGTACT
GAAATTTGAAAAGGAATTTCCCAATTTTGATAAACAGGAACCTTAGAGAAGTACTCAAGGAACATGAATGG
ATGTACACAGAAGCTTTAGAATCTCTAAAAGTGTTCAGAGACCAAGATATGCAATATGCATCACAAA
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ACTAAAACAGAAATTTTCAATGAAAGCACAAAATGGCTTTAACAAGAAACGTAAAAAAAATGTTTTAAT
CAAAAGAGAGTTGTTGAAGACTCTGAATATGATTCAGGTTCTGATGTCGGTAGTTCACTAGATGAGGACT
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TAAATTGACCAACAAGTTACCATGCTTACTGAAATGGAGGTGGATGGAACATAGAACAACCTTCCATT



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CTAAACCAGAGTTTGCTCACTCAAGCCCTATCAGAAGGTTGGTTTGAATTGGCTGGCATTGGTACATAAAC
 ATGGACTTAATGGCATTGGCAGATGAAATGGCCTAGGAAAACTATTCAAGCCATTGCATTTCTGGC
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 CTTAGAGGTTCTATTAACATCATCAGCATAGGTACCTCAGATTAGATGGAAAGACTCAGATTTCTGAA
 AGGATTCATCTAATTGATGAGTTAATACCGATATGGATATCTTTGTGTTCTGCTATCAACAAAAGCTG
 GTGGATTAGGAATAAATCTGACTTCAGCAAATGTTGTTATACTTCACGATATTGACTGTAATCCTTATAA
 TGACAAACAAGCAGAAGATAGATGCCATAGAGTAGGCCAGACTAAAGAAGCACTAGTTATAAACTAATA
 AGCCAAGGACGATTGAAGAATCCATGCTAAAAATTAACCAACAGAAATTGAAACTAGAACAGGATATGA
 CTACAGTAGATGAAGGTGATGAAGGGAGTATGCCAGCAGATATAGCCACATTACTAAAAACATCAATGGG
 CCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG208438 representing NM_020159
 Red=Cloning site Green=Tags(s)

MNLFNLDLDRFRFEKRNKIEEAEATPQSPQGPSSPISLSAEENEAEVSRANTPDSITEKTEDSSVPE
 TPDNERKASISYFKNQRGIQYIDLSSDSEDVVSPPNCSTVQEKTFNKDTVIIIVSEPSSEDEESQGLPTMAR
 RNDDISELEDLSELEDLKDALKQLKELFPQRSDNDLLKLIESTSTMDGAIAAALLMFGDAGGGPRKRKL
 SSSSEPYEDEFNDDQSIKKTRLDHGEESNESAESSNNWEKQESIVLKLQKEFPNFDKQELREVLKEHEW
 MYTEALESCLKVFAEDQDMQYASQSEVPNGKEVSSRSQNYPKNATKTKLKQKFSMKAQNGFNKRRKNVFN
 QKRVEDSEYDSGSDVGSLLDEYSSGEEVMEDGYKGIHLHFLQDASIGELTLIPQCSQKKAQKITELRP
 FNSWEALFTKMSKTNGLSEDLIWHCKTLIQERDVVIRLMNKCEDI SNKLTQVMTL TNGGGWNIEQPSI
 LNQSLSLKPYQKVLNWLALVHKHGLNGILADEMGLGKTIQAI AFLAYL YQEGNNGPHL I VVPASTIDNW
 LREVNLWCPTLKVLCYYSQEERKQIRFNIHSRYEDYNVIVTTYNCAISSDDRSLFRRLKLNIAIFDEG
 HMLKNMGSIRYQHLMTINANNRLLL TGTPVQNNLLELMSLLNFVMPHMFSSSTSEIRRMFSSKTKSADEQ
 SIYEKERIAHAKQIIKPFILRRVKEEVKQLPPKDRIELCAMSEKQEQLYLGFLNRLKKSINNLVTEKN
 TEMCNVMMQLRKMANHPLLHRQYYTAEKLKEMSQLMLKEPTHCEANPDLIFEDMEVMTDFELHVLCKQYR
 HINNFQDMDLILDGSKFRVLGCILSELKQKGDVVLFSSQFTMMLDILEVLLKHHQHRYLRDGGKTQISE
 RIHLIDEFNTDMDIFVLLSTKAGGLGINLTSANVVILHDIDCNPYNDKQAE DRCHRVGQTKEALVIKLI
 SQGTIEESMLKINQKLEQDMTTVDEGDEGSMPADIATLLKTSMGL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_020159

ORF Size: 3084 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

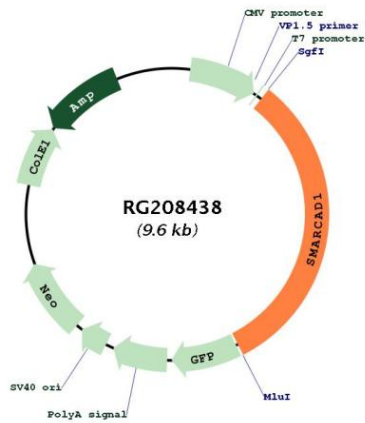
RefSeq: [NM_020159.1](#), [NP_064544.1](#)

RefSeq Size: 4935 bp

RefSeq ORF: 3081 bp

Locus ID: 56916
UniProt ID: [Q9H4L7](#)
Cytogenetics: 4q22.3
Domains: SNF2_N, DEAD, helicase_C, CUE
Protein Families: Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Gene Summary: This gene encodes a member of the SNF subfamily of helicase proteins. The encoded protein plays a critical role in the restoration of heterochromatin organization and propagation of epigenetic patterns following DNA replication by mediating histone H3/H4 deacetylation. Mutations in this gene are associated with adermatoglyphia. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RG208438