

Product datasheet for **MG207736**

Smarcd3 (NM_025891) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarcd3 (NM_025891) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smarcd3
Synonyms:	1500001J14Rik; 2210409C08Rik; BAF60C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG207736 representing NM_025891
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGCGGACGAAGTTGCCGGAGGGGCGCGCAAAGCCACGAAAAGCAAACCTTTTTGAGTTTCTGGTCC
 ATGGGGTGCGCCCGGGATGCCGTCTGGAGCCGAATGCCCCACCAGGGGCGCCATGGGCCCCCGGG
 CCCCCGTACATGGGCAGCCCCGCGGTACGACCCGGCCTGGCCCCGCGGGCATGGAGCCCGCCGCAAG
 CGAGCAGCGCCCCGCGGGCAGAGCCAGGCACAGGGCCAGGGCCAGCCGTGCCACCGCCCCAGCGC
 GGAGCCGAGTGCCAAGAGGAGGAAGATGGCTGACAAAATCCTCCCTCAAAGGATTCGGGAGCTGGTACC
 CGAGTCCCAGGCTTACATGGACCTCTAGCATTGAGAGGAACTGGATCAAACCATCATGCGGAAGCGG
 GTGGACATCCAGGAGGCCCTGAAGAGGCCATGAAGCAAAGCGAAAGCTGCGCCTTTATATCTCCAATA
 CTTTTAACCTGCGAAGCCTGATGCGGAAGACTCTGATGGCAGCATTGCCTCCTGGGAGCTGCGGGTGA
 GGGGAAGCTCTTGATGATCCTAGTAAGCAGAAGAGGAAGTTTTCTTCTTCAAGAGTTTGGTCATT
 GAGTTGGACAAAGACCTTTATGGCCAGACAACCACTTGTGAGTGGCACCCGGACCCACAACCCAGG
 AAACAGATGGGTTCCAAGTGAAGAGACCAGGGACTTGAGTGTGCGCTGCACCCTGCTCCTGATGCTGGA
 CTATCAGCCTCCCAGTTCAAATTGGACCCCGCTTAGCCCGGCTGCTGGGGTTACACACACAGAGCCGC
 TCAGCCATTGTCCAGGCACTGTGGCAGTATGTGAAGACCAACAGGCTACAGGACTCCCATGACAAGGAGT
 ACATCAATGGCGACAAGTATTTCCAGCAGATTTTTGACTGCCCCCGCCTAAAGTTCTCTGAGATCCCCA
 GCGCCTCACAGCCTGCTGCTGCCCCCTGACCCATTGTGATCAACCACGTCATCAGCGTGGACCCATCA
 GACCAGAAGAAGCAGCGTGCTATGACATAGATGTGGAGTGGAGGAACCGCTGAAAGGGCAGATGAGTA
 GCTTCCTCCTGCCACGGCCAACCAGCAGGAGATCAGTGCTCTGGACAGTAAGATCCATGAGACGATTGA
 GTCATAAACACGCTCAAGATCCAGAGGGACTTCATGCTAAGTTTCTCCAGAGACCCCAAAGGCTACGTC
 CAAGACCTGCTCCGCTCCAGAGCCGTGATCTCAAGGTGATGACAGATGTGGCAGGGAACCCCGAGGAAG
 AACGCAGGGCTGAGTTCTACCACCAGCCCTGGTCCCAGGAAGCCGTTAGCCGCTACTTCTACTGTAAGAT
 CCAGCAGCGCAGGAGGAGCTGGAGCAGTCGCTGGTCTGCGCAACACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG207736 representing NM_025891
 Red=Cloning site Green=Tags(s)

MAADEVAGGARKATKSKLFEFLVHGVRPGMPSGARMPHQGAPMPPGSPYMGSPA VRPGLAPAGMEPARK
 RAAPPPGQSQAQGGQPVTAPARSRS AKRRK MADKILPQRIRELV PESQAYMDLLAFERKLDQTIMRKR
 VDIQEALKRPMKQKRKLRLYISNTFNP AKPDAEDSDGSIASWELRVEGKLLDDPSKQKRKFSFFKSLVI
 ELDKDL YGPDNHLVEWHRTPTTQETDGFQV KRP GDLSVRCTLLMLDYQPPQFKLDPRLARLLGLHTQSR
 SAIVQALWQYVKTNRLQSDHKEYINGDKYFQQIFDCPRLKFSEIPQLTALLPPDP IVINHVISVDPS
 DQKKTACYDIDVEVEEPLKGMSSFLLSTANQQEISALDSKIHETIESINQLKIQRFMLSF SRDPKGYV
 QDLLRSQSRDLKVM TDVAGNPEEERRAEFYHQ PWSQEAVSRYFYCKIQRRQEELEQSLVVRNT

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_025891

ORF Size: 1449 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_025891.3](#), [NP_080167.3](#)

RefSeq Size: 1743 bp

RefSeq ORF: 1452 bp

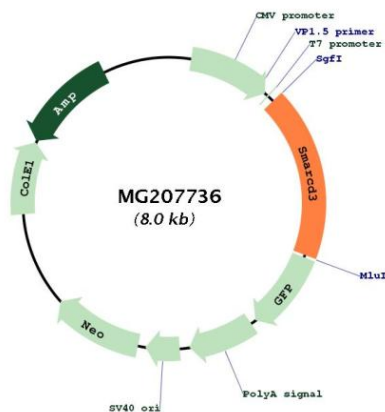
Locus ID: 66993

UniProt ID: [Q6P9Z1](#)

Cytogenetics: 5 A3

Gene Summary: Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner (PubMed:22952240, PubMed:26601204). Stimulates nuclear receptor mediated transcription. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a postmitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to postmitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth (PubMed:17640523).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG207736