

Product datasheet for **MG211537**

Smarca5 (BC053069) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smarca5 (BC053069) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smarca5
Synonyms:	4933427E24Rik; D030040M08Rik; D330027N15Rik; MommeD4; Snf2h
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211537 representing BC053069 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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CTA
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG211537 representing BC053069

Red=Cloning site Green=Tags(s)

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RHRRTQEEDDELL TESSKATNVCTRFE DSPSYVKGKLRDYQVRGLNWL ISLYENGINILADEMGLGK
TLQTI SLLGYMKHYRNIPGPHMVL VPKSTLHNW MSEFKKWPTLRSVCLIGDKEQRAAFVRDVL L PGEWD
VCVTSYEMLIKEKSVFKFNWRYLVIDEAHRIKNEKSKLSEIVREFKTTNRLLLTGTP LQNNLHELWLL
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LPKLKEQGS RVLIFSQMTRVLDILEDYCMWRNYEYCRLDGQTPHDERQDSINAYNEPNSTKFV FMLSTRA
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L
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TRTRPLE - GFP Tag - V

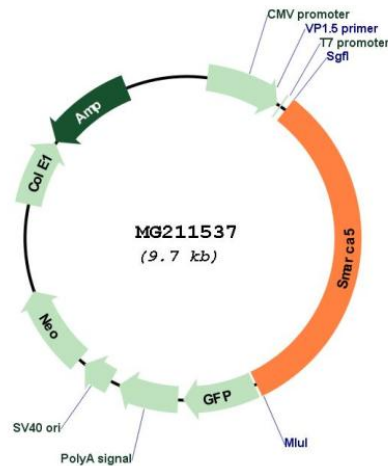
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: BC053069

ORF Size: 3155 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:	<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>BC053069, AAH53069</u>
RefSeq Size:	4658 bp
RefSeq ORF:	3155 bp
Locus ID:	93762
Cytogenetics:	8 C2
Gene Summary:	Helicase that possesses intrinsic ATP-dependent nucleosome-remodeling activity. Complexes containing SMARCA5 are capable of forming ordered nucleosome arrays on chromatin; this may require intact histone H4 tails. Also required for replication of pericentric heterochromatin in S-phase specifically in conjunction with BAZ1A. Probably plays a role in repression of polI dependent transcription of the rDNA locus, through the recruitment of the SIN3/HDAC1 corepressor complex to the rDNA promoter. Essential component of the WICH complex, a chromatin remodeling complex that mobilizes nucleosomes and reconfigures irregular chromatin to a regular nucleosomal array structure. The WICH complex regulates the transcription of various genes, has a role in RNA polymerase I and RNA polymerase III transcription, mediates the histone H2AX phosphorylation at 'Tyr-142', and is involved in the maintenance of chromatin structures during DNA replication processes. Essential component of the NoRC (nucleolar remodeling complex) complex, a complex that mediates silencing of a fraction of rDNA by recruiting histone-modifying enzymes and DNA methyltransferases, leading to heterochromatin formation and transcriptional silencing.[UniProtKB/Swiss-Prot Function]