

# **Product datasheet for MR211537L4**

## OriGene Technologies, Inc.

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## Smarca5 (NM\_053124) Mouse Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Smarca5 (NM\_053124) Mouse Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Smarca5

**Synonyms:** 4933427E24Rik; D030040M08Rik; D330027N15Rik; MommeD4; Snf2h

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

**E. coli Selection:** Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR211537).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_053124

ORF Size: 3153 bp



#### Smarca5 (NM\_053124) Mouse Tagged Lenti ORF Clone - MR211537L4

**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 053124.2, NP 444354.2

 RefSeq Size:
 4658 bp

 RefSeq ORF:
 3156 bp

 Locus ID:
 93762

 UniProt ID:
 Q91ZW3

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 poll 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]