

## **Product datasheet for MR211783L3V**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Smc2 (NM\_008017) Mouse Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Smc2 (NM\_008017) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Smc2

**Synonyms:** 5730502P04Rik; Al255214; AW545314; CAP; CAP-E; CAPE; Fin; Fin16; SMC-2; Smc2l1

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM\_008017

**ORF Size:** 3573 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR211783).

OTI Disclaimer:

Sequence:

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.

**RefSeq:** <u>NM 008017.4, NP 032043.3</u>

 RefSeq Size:
 5455 bp

 RefSeq ORF:
 3576 bp

 Locus ID:
 14211

 UniProt ID:
 Q8CG48

 Cytogenetics:
 4 28.31 cM







## **Gene Summary:**

The protein encoded by this gene is a component of both condensin I and condensin II complexes, and forms a heterodimer with structural maintenance of chromosome 4 (Smc4). This heterodimer is the catalytic subunit for both condensin complexes, and is involved in several processes, including chromosome condensation during mitosis and meiosis, cohesin removal during mitosis and meiosis, and single-strand break (SSB) repair. Reduced expression of this gene results in chromosome segregation defects during mitosis and meiosis, with a more severe defect observed in embryonic stem cells. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2014]