

OriGene Technologies, Inc.

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Product datasheet for MR211783L4V

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-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_008017
ORF Size:	3573 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR211783).
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. <u>More info</u>
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:	<u>Q8CG48</u>
Cytogenetics:	4 28.31 cM



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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]

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