

Product datasheet for **MC215908**

Sde2 (NM_145943) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sde2 (NM_145943) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sde2
Synonyms:	MGC30618
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC215908 representing NM_145943
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGAGGCTGCGGTGGTGGCGTGGGTTTCGCGCCCCGGTACCGTGTGGAAGGCGCTGCCGTGTGCCT
CGGTTGGGTGCTCCGTGCGCGATGTGATCTACCGACACTGCCAGGAACAGGAAGTCCCGTGAATGCTT
CTTTGTGACGTGCAATGGAGTCTCGTTAATGCCGGTGATAAGGTGCAGCATGGAGCCGTGTACAGTTTG
GAGCCCAGGCTTCGTGGGGGAAAGGAGGTTTTGGGTCTATGCTTCGAGCACTTGGTGCACAGATAGAGA
AGACAACCAATAGAGAAGCCTGCCGGATCTCAGTGGGAGGAGATTACGAGATGTCAATCATGAGAAAGC
GATGGCTGAGTGGTAAAACAGCAAGCTGAGCGAGAGGCTGAAAAGGAGCAAAGGCGCCTGGAGAGGCTG
CAGCGAAAGCTTGCCGAGCCTGCACACTGCTTCACCAGTCCCAGTACCAGAGGCAGTGCATGAGATGG
CTGAGCGTCTGGAGGACTCAGTCTCAAAGGTATGCAGGCTGCATCCAGCAAGATGGTATCAGCAGAAAT
CACTGAGACTCGAAACGGCCTAACAAGTCAAAAACGGACCAGGAACTAGTGCAAAAAAAGGAAAAGG
AAATGCTTTTGGTTGGGCATGGATGGGCTGGAGGCTGCCGAGGGTCCAGTACTGGAAGCTCAGAGGACA
GCTCAGAGGATGACAGTGAAGTCTCCTGGGACTTCGGAGCAGAGCTGTGTGCTCGGGAAGACCGCAT
TGATGCTGTAGAGGTGGCAGCCGACCGACTGGCAGTCTCGGAGCTCGGCCCTGGTACACACTCTGAG
TCACCTGAAAAGCTTCAGTGCCCGTGACCGAGCCTGGGCAGGGCATTGGGAGAACACAGGAAGTGAAGC
CAGGAGAGACCTTGACAAGGAGTGAACGAGAGGAAGACAGTACAGACCCAGAGGAGACGCCAGCAAG
GAAGGAAACAGAGAGTCTGAGGCCACAGAAAAGGACCAAAAGACAGGAATGTCTGGTGGGACAGAGCT
GCCATGGTTTTGTCTGGAGAAGACAGGAAAAGTGTCCCTGTGCTAATCTGGAGGAAACAACACTCAGGAG
ACACAGCTCTTGGTCTGGAAGCGGTGGATCTGTGAGTTCAGCTTCAGCTGCAGCCGAGTTGGAGTCGCTGG
TTTGGAGAGGCTCAAGTGTGAAGTGTGAGTCTTGGACTGAAAGTGTGGGGGACCCTGCAGGAGCCGCGCA
GCCAGGCTCTTCTGTGAGAGGCTCACAAAGGAACTATTGACCCAGCTTTATTTGCCAAGCCTTCCA
AGGGGAAGAAGAAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_145943

Insert Size: 1347 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_145943.1](#), [NP_666055.1](#)

RefSeq Size: 3203 bp

RefSeq ORF: 1347 bp

Locus ID: 208768

UniProt ID: [Q8K1J5](#)

Cytogenetics: 1 H4

Gene Summary: Involved in both DNA replication and cell cycle control. Unprocessed SDE2 interacts with PCNA via its PIP-box. The interaction with PCNA prevents monoubiquitination of the latter thereby inhibiting translesion DNA synthesis. The binding of SDE2 to PCNA also leads to processing of SDE2 by an unidentified deubiquitinating enzyme, cleaving off the N-terminal ubiquitin-like domain. The resulting mature SDE2 is degraded by the DCX(DTL) complex in a cell cycle- and DNA damage dependent manner. Binding of SDE2 to PCNA is necessary to counteract damage due to ultraviolet light induced replication stress. The complete degradation of SDE2 is necessary to allow S-phase progression.[UniProtKB/Swiss-Prot Function]