

Recombinant SETMAR protein

Catalog No: 31454, 31854

Expressed In: Baculovirus

Quantity: 20 µg

Concentration: 0.3 µg/µl

Source: Human

Buffer Contents: Recombinant SETMAR protein is supplied at a concentration of 0.3 µg/µl in 25 mM HEPES pH 7.5, 300 mM NaCl, 5% glycerol, 0.04% Triton X-100, 0.2 mM TCEP.

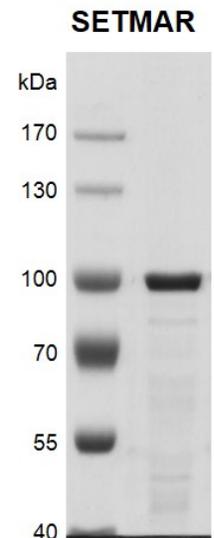
Background: SETMAR (SET Domain and mariner transposase fusion gene) is a ubiquitously expressed nuclear fusion protein that contains an N-terminal SET domain with histone methyltransferase activity and a C-terminal mariner (MAR) transposase domain that recognizes and binds DNA. The gene exists as a fusion gene only in anthropoid primates; other organisms lack mariner transposase domain. SETMAR binds DNA and functions in DNA repair activities including non-homologous end joining and double strand break repair. The mariner transposase domain recognizes and binds the 19-mer core of the 5'-TIR (terminal inverted repeats) of the Hsmar1 element. The SET domain specifically methylates lysines 4 and 36 of histone H3 which are epigenetic marks associated with transcriptional activation. SETMAR demonstrates *in vivo* end joining activity and may mediate genomic integration of foreign DNA.

Protein Details: Recombinant SETMAR (accession number NP_006506.3) was expressed in Sf9 cells and contains an N-terminal FLAG tag with an observed molecular weight of 79 kDa.

Application Notes: Recombinant SETMAR is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Recombinant SETMAR protein gel. SETMAR protein was run on an 8% SDS-PAGE gel and stained with Coomassie Blue.

MW: 79 kDa

Purity: >90%