

Product Information

Anti-SET antibody, Mouse monoclonal
clone SET51, purified from hybridoma cell culture

Catalog Number **SAB4200479**

Product Description

Anti-SET (mouse IgG2b isotype) is derived from the hybridoma SET51 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a peptide corresponding to a sequence within the internal region of human SET (GenelD: 6418), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Anti-SET recognizes human, monkey, bovine dog, rat and mouse SET. The product may be used in several immunochemical techniques including immunoblotting (~37 kDa). Staining of the SET band in immunoblotting is specifically inhibited by the immunizing protein.

The SET protein is localized to the nucleus and cytoplasm and has a critical role in the regulation of normal and cancer signal transduction. It contains a highly acidic C-terminal region that is involved in chromatin remodeling. In fact, SET itself is also a potent and specific inhibitor of protein phosphatase 2A (PP2A) activity, and exerts its activity via its N-terminal part.¹ In addition, it has also been described as an inhibitor of the tumor suppressor NM23-H1, a granzyme A DNase-activated factor, and a negative regulator of histone acetylation.²⁻³ Interestingly, in acute non-lymphocytic myeloid leukaemia, SET was found to be fused to CAN (nucleoporin Nup214), apparently as a result of a chromosomal translocation. As such, the formation of this SET-CAN fusion protein may impair the normal regulation of PP2A and contribute to leukaemogenesis.¹ SET was also found to regulate human NK-cell cytotoxicity, by regulating NK-cell IFN- γ production granzyme B gene expression via PP2A inactivation.⁴

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For extended storage, freeze at -20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.5-1.0 μ g/mL is recommended using K562 total cell extracts.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Janssens, V., and Goris, J., *Biochem. J.*, **353**, 417-439 (2001).
2. Fan, Z., et al., *Cell*, **112**, 659-672 (2003).
3. Seo S.B. et al., *Cell*, **104**, 119-130 (2001).
4. Trotta, R., et al., *Blood*, **117**, 2378-2384 (2011).

RC,GG,AK-N,PHC 04/21-1