

Menin antibody (pAb)

Catalog Nos: 61005, 61006

RRID: AB_2615023

Isotype: IgG

Application(s): ChIP, ChIP-Seq, WB

Reactivity: Human, Mouse

Volumes: 100 µl, 10 µl

Purification: Affinity Purified

Host: Rabbit

Molecular Weight: 80 kDa

Background: Menin (MEN1, SCG2) is a tumor suppressor and a component of multiple MLL-containing protein complexes (MLL, ACSOM, MLL2/3 and MLL3/4), which methylate histone H3 at lysine 4. Menin interacts directly with MLL through a domain in the N-terminus of MLL. It also interacts with RNA polymerase II large subunit C-terminal domain phosphorylated at Ser5. Menin is involved in the activation of HOX gene expression and is localized along with MLL at several HOX gene promoters. It is also important for activating the expression of several cell cycle regulators, indicating a mechanism for its role as a tumor suppressor. Defects in Menin are associated with inherited Multiple Endocrine Neoplasia type I, a dominant predisposition to cancer of a number of endocrine tissues.

Immunogen: This Menin antibody was raised against a peptide corresponding to amino acids within the C-terminal region of human Menin.

Buffer: Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

ChIP: 5 µl per ChIP

ChIP-Seq & ChIP-chip: 5 µl each

WB*: 1:500 – 1:1,000 dilution

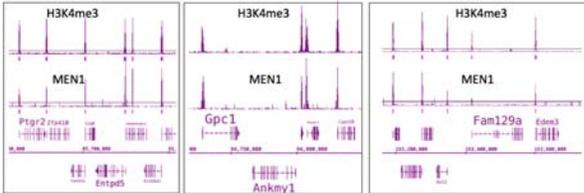
*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

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

Menin antibody (pAb) tested by ChIP-Seq.

ChIP was performed using the ChIP-IT[®] High Sensitivity Kit (Cat. No. 53040) with 25 µg of chromatin from a mouse thymus and 5 µg of MEN1 antibody. ChIP DNA was sequenced on the Illumina HiSeq and 15 million sequence tags were mapped to identify MEN1 binding sites. MEN1 is a subunit of the MLL complex which catalyzes H3K4 trimethylation and is therefore expected to localize with H3K4me3. A sampling of the MEN1 ChIP-Seq data shows the expected co-localization of MEN1 and H3K4me3.



Western blot of Menin antibody.

Nuclear extract of HEK293 cells (20 µg) probed with Menin antibody (1:1,000).

