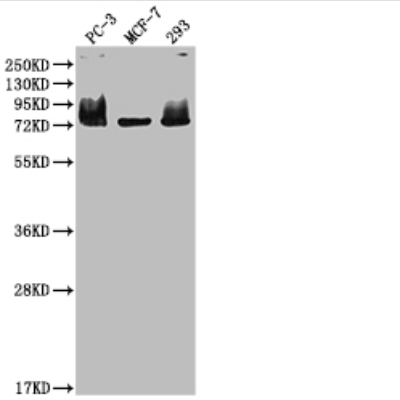
MEN1 Recombinant Monoclonal Antibody

Product Code	CSB-RA242999A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O00255
Immunogen	A synthesized peptide derived from human Menin
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	Essential component of a MLL/SET1 histone methyltransferase (HMT) complex, a complex that specifically methylates 'Lys-4' of histone H3 (H3K4). Functions as a transcriptional regulator. Binds to the TERT promoter and represses telomerase expression. Plays a role in TGFB1-mediated inhibition of cell-proliferation, possibly regulating SMAD3 transcriptional activity. Represses JUND-mediated transcriptional activation on AP1 sites, as well as that mediated by NFKB subunit RELA. Positively regulates HOXC8 and HOXC6 gene expression. May be involved in normal hematopoiesis through the activation of HOXA9 expression (By similarity). May be involved in DNA repair.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer
Gene Names	MEN1
Clone No.	8G11

Image



Western Blot
Positive WB detected in: PC-3 whole cell lysate, MCF-7 whole cell lysate, 293 whole cell lysate
All lanes: MEN1 antibody at 1:2000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 69, 68, 64 kDa
Observed band size: 75 kDa

Description

The MEN1 recombinant monoclonal antibody is a valuable tool for detecting human MEN1 protein in ELISA and WB applications. This antibody is produced using recombinant DNA technology. First, the cDNA of the MEN1 antibody-producing hybridomas is sequenced, and the gene coding for the MEN1 monoclonal antibody is synthesized. The hybridomas are formed by fusing B cells from an animal that was immunized with a synthesized peptide derived from human MEN1, with myeloma cells. The synthesized gene is then cloned into a vector. The recombinant vector is transfected into cells for cultivation. Finally, the resulting MEN1 recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography.

The MEN1 protein, also known as menin, is a tumor suppressor protein that helps regulate the expression of various genes involved in cell growth and division. Specifically, menin interacts with a variety of transcription factors, including those involved in regulating the cell cycle and DNA repair, and modulates their activity to prevent uncontrolled cell growth and division. Mutations in the MEN1 gene can lead to the development of multiple endocrine neoplasia type 1, a rare inherited disorder characterized by tumors of the endocrine glands.