



Mouse Anti-MORC3 monoclonal antibody, clone 28B0 (CABT-RM120)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Specifically detects MORC family CW-type zinc finger protein 3 (MORC3). It targets an epitope with the C-terminal region.
Target	MORC3
Immunogen	His-tagged full-length recombinant human MORC family CW-type zinc finger protein 3 (MORC3).
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human, Mouse, Rat
Clone	28B0
Purification	Protein G purified
Conjugate	unconjugated
Applications	WB, ICC
Molecular Weight	~ 160 and 230 kDa observed; 107.11 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 µg
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl

Preservative	0.05% sodium azide
Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction	MORC family CW-type zinc finger protein 3 is encoded by the MORC3 gene in human. MORC3 is a homodimeric protein of the MORC protein family characterized by conserved structures consisting of Gyrase H, Hsp90, and MutL (GHL)-ATPase domain at its N-terminus and a CW type zinc finger domain (aa 404-454). It is expressed in heart, placenta, skeletal muscle, brain, pancreas, lung, and liver. MORC3 serves as a nuclear factor that forms MORC3-NBs (nuclear bodies) via an ATP-dependent mechanism. It is also shown to be a target of herpes simplex virus 1 (HSV-1) ICP0-mediated degradation. It is shown to be essential for fully efficient recruitment of PML, Sp100, hDaxx, and H2AX to sites associated with HSV-1 genomes entering the host cell nucleus. MORC3 recruits TP53 and SP100 to PML-NBs, hence, it is also involved in the regulation of TP53 activity. It regulates p53 activation via MORC3-ATPase activity. It can also induce p53-dependent premature senescence.
Keywords	MORC3; MORC family CW-type zinc finger 3; ZCWCC3, zinc finger, CW type with coiled coil domain 3; zinc finger, CW type with coiled coil domain 3; MORC family CW-type zinc finger protein 3; KIAA0136; NXP2; ZCW5; nuclear matrix protein NXP2; zinc finger, CW type with coiled-coil domain 3

GENE INFORMATION

Entrez Gene ID	23515
UniProt ID	Q14149
