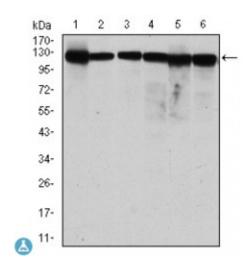


Anti-BM28 antibody



Description Mouse monoclonal to BM28.

Model STJ97872

Host Mouse

Reactivity Human

Applications ELISA, FC, IF, IHC, WB

Immunogen Purified recombinant fragment of human BM28 expressed in E. Coli.

Gene ID 4171

Gene Symbol MCM2

Dilution range WB 1:500-1:2000IHC 1:200-1:1000IF 1:200-1:1000FC 1:200-1:400ELISA

1:10000

Specificity BM28 Monoclonal Antibody detects endogenous levels of BM28 protein.

Purification Affinity purification

Clone ID 10000000

Note For Research Use Only (RUO).

Protein Name DNA replication licensing factor MCM2 Minichromosome maintenance

protein 2 homolog Nuclear protein BM28

Clonality Monoclonal

Conjugation Unconjugated

Isotype IgG1

Formulation Ascitic fluid containing 0.03% sodium azide.

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:6944OMIM:116945</u>

Alternative Names DNA replication licensing factor MCM2 Minichromosome maintenance

protein 2 homolog Nuclear protein BM28

Function Acts as component of the MCM2-7 complex (MCM complex) which is the

putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. The active ATPase sites in the MCM2-7 ring are formed through the interaction surfaces of two neighboring subunits such that a critical structure of a conserved arginine finger motif is provided in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity. Required for the entry in S phase and for cell division. Plays a role in terminally differentiated

hair cells development of the cochlea and induces cells apoptosis.

Cellular Localization

Nucleus

Post-translational Modifications Phosphorylated on Ser-108 by ATR in proliferating cells. Ser-108 proliferation is increased by genotoxic agents. Ser-40 is mediated by the CDC7-DBF4 and CDC7-DBF4B complexes, while Ser-53 phosphorylation is only mediated by the CDC7-DBF4 complex. Phosphorylation by the CDC7-DBF4 complex during G1/S phase is required for the initiation of DNA

replication.

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