Revision 1

Store at -20C

#14805

CIP2A (D1M3H) Rabbit mAb

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	90	Rabbit IgG	#Q8TCG1	57650

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

CIP2A (D1M3H) Rabbit mAb recognizes endogenous levels of total CIP2A protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val342 of human CIP2A protein.

Background

Protein phosphatase 2A (PP2A) is a trimeric protein phosphatase and tumor suppressor that regulates the phosphorylation status of a wide variety of phosphoproteins. PP2A targets include many that play a role in the maintenance and progression of cancer (1). The cancerous inhibitor of protein phosphatase 2A (CIP2A) is a single pass membrane protein that binds the PP2A catalytic subunit to inhibit PP2A phosphatase activity (2). CIP2A is normally expressed at low levels in normal cells and tissues, but is elevated in human malignancies where it is thought to be oncogenic. Research studies demonstrate aberrant CIP2A expression in multiple tumor types, including those derived from the head and neck, liver, colon, lung, osteosarcoma, pancreatic, breast, and myeloid cancers (reviewed in 3). This evidence suggests that CIP2A interacts with many proteins that may play a role in cancer maintenance and progression (3). Additional studies indicate that CIP2A inhibits PP2A-mediated dephosphorylation of the proto-oncogene Myc at Ser64, which stabilizes and prevents proteolytic degradation of the Myc transcription factor (4).

Background References

1. Westermarck, J. and Hahn, W.C. (2008) *Trends Mol Med* 14, 152-60.
2. Junttila, M.R. et al. (2007) *Cell* 130, 51-62.
3. De, P. et al. (2014) *Oncotarget* 5, 4581-602.
4. Junttila, M.R. and Westermarck, J. (2008) *Cell Cycle* 7, 592-6.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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