

Phospho-DNAJC2/MPP11 (Ser47) Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	80	Rabbit	#Q99543	27000

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

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

Specificity/Sensitivity

Phospho-DNAJC2/MPP11 (Ser47) Antibody recognizes endogenous levels of DNAJC2/MPP11 protein only when phosphorylated at Ser47.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser47 of human and mouse DNAJC2/MPP11 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

DnaJ/Hsp40 proteins are a conserved family of J-domain-containing chaperone proteins that assist in protein folding and stability through their interactions with Hsp70 chaperone proteins (reviewed in 1). DNAJC2, also known as MPP11 (M-phase phosphoprotein 11 protein) or ZRF1, is a component of the ribosome-associated complex (RAC). The RAC is localized to the cytoplasm, where it assists in maintaining appropriate folding of nascent polypeptides by stimulating the ATPase activity of Hsp70 chaperone proteins (2,3). In the nucleus, MPP11 is involved in the activation of transcription through mediation of the switch from polycomb-repressed to active chromatin (4). Previous studies have shown MPP11 is overexpressed in leukemia and head and neck cancer, leading researchers to suggest MPP11 may be a potential therapeutic target (5-7). MPP11 is phosphorylated at serine 47 by S6 kinase, which regulates senescence in fibroblast cells (8). Phospho-DNAJC2/MPP11 (Ser47) Antibody is directed at a site that was identified at Cell Signaling Technology (CST) using PhosphoScan®, CST's LC-MS/MS platform for modification site discovery. Please visit PhosphoSitePlus®, CST's modification site knowledgebase, at www.phosphosite.org for more information.

Background References

1. Qiu, X.B. et al. (2006) *Cell Mol Life Sci* 63, 2560-70.
2. Hundley, H.A. et al. (2005) *Science* 308, 1032-4.
3. Otto, H. et al. (2005) *Proc Natl Acad Sci U S A* 102, 10064-9.
4. Richly, H. et al. (2010) *Nature* 468, 1124-8.
5. Greiner, J. et al. (2003) *Int J Cancer* 106, 224-31.
6. Resto, V.A. et al. (2000) *Cancer Res* 60, 5529-35.
7. Tabarkiewicz, J. and Giannopoulos, K. (2010) *Transplant Proc* 42, 3293-6.
8. Barilari, M. et al. (2017) *EMBO J* 36, 736-750.

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

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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