Revision 1

#12397 Store at -20C

Phospho-DNAJC2/MPP11 (Ser47) Antibody

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355) orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

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

Product Usage Information

Application	Dilution
Western Blotting	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

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

Trademarks and Patents

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.