Revision 6

#11994 Store at -20C

Phospho-DDR1 (Tyr792) Antibody

Cell Signaling TECHNOLOGY®

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	125	Rabbit	#Q08345	780

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 and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Phospho-DDR1 (Tyr792) Antibody recognizes endogenous levels of DDR1 protein only when phosphorylated at Tyr792. This antibody may cross-reacts with other tyrosine-phosphorylated RTKs.

Species predicted to react based on 100% sequence homology:

Mouse, Rat

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr792 of human DDR1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The discoidin domain receptors (DDRs) are receptor tyrosine kinases with a discoidin homology repeat in their extracellular domains, activated by binding to extracellular matrix collagens. So far, two mammalian DDRs have been identified: DDR1 and DDR2 (1). They are widely expressed in human tissues and may have roles in smooth muscle cell-mediated collagen remodeling (2). Research studies have implicated aberrant expression and signaling of DDRs in human diseases related to increased matrix degradation and remodeling, such as cardiovascular disease, liver fibrosis, and tumor invasion (1).

Phosphorylation of DDR1 at Tyr792 was identified at Cell Signaling Technology using PTMScan®, our LC-MS/MS platform for phosphorylation site discovery (3). Tyr792 is located in the activation loop of the DDR1 kinase domain.

Background References

1. Vogel, W. (1999) *FASEB J* 13 Suppl, S77-82.
2. Ferri, N. et al. (2004) *Am J Pathol* 164, 1575-85.
3. Rikova, K. et al. (2007) *Cell* 131, 1190-203.

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 **IP:** Immunoprecipitation

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

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