Revision 1

#12316 Store at -20C

Phospho-Scribble (Ser1220) (D8A2) Rabbit mAb

Cell Signaling TECHNOLOGY®

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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:
WB	H M	Endogenous	240	Rabbit IgG	#Q14160	23513

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, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Phospho-Scribble (Ser1220) (D8A2) Rabbit mAb recognizes endogenous levels of scribble protein only when phosphorylated at Ser1220.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser1220 of human scribble protein.

Background

Scribble (Scrib) was originally identified in a genetic screen in *Drosophila* along with cell polarity determinants Discs Large (Dlg) and Lethal giant larvae (Lgl). *Drosophila* mutants homozygous for these genes share similar phenotypes, including the loss of apicobasal cell polarity and neoplastic tissue overgrowth. These phenotypic similarities suggest that these three proteins function in a common pathway important for establishing and maintaining apicobasal polarity in epithelial cells (1,2). Scribble contains many leucine-rich repeats and PDZ domains important for localizing scribble to adherens junctions and basolateral regions of mammalian epithelial cells (3). Scribble reportedly binds β-catenin, APC, E-cadherin and the E6 protein from high-risk virus type of HPV through a short motif important for E6-induced cell transformation (4-8). Overexpression of scribble inhibits transformation of rodent epithelial cells by HPV E6/7 proteins (8).
The phosphorylation state of Scribble has been shown to be functionally important, in part by regulating subcellular localization (9). Mass spectrometry studies have identified phosphorylation at Ser1220 as a frequent modification in a variety of cell and tissue types (10-13). The functional significance of this modification remains to be elucidated.

Background References

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5. Qin, Y. et al. (2005) *J Cell Biol* 171, 1061-71.
6. Navarro, C. et al. (2005) *Oncogene* 24, 4330-9.
7. Takizawa, S. et al. (2006) *Genes Cells* 11, 453-64.
8. Nguyen, M.L. et al. (2003) *J Virol* 77, 6957-64.
9. Yoshihara, K. et al. (2011) *Exp Cell Res* 317, 413-22.
10. Olsen, J.V. et al. (2010) *Sci Signal* 3, ra3.
11. Han, G. et al. (2010) *Electrophoresis* 31, 1080-9.
12. Brill, L.M. et al. (2009) *Cell Stem Cell* 5, 204-13.
13. Wang, Y.T. et al. (2010) *J Proteome Res* 9, 5582-97.

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 nonfat dry milk, 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

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Limited Uses