

# Phospho-REPS1 (Ser709) (D8C1) Rabbit mAb

✓ 100 µl  
(10 western blots)



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Entrez-Gene ID #85021  
Swiss-Prot Acc. #Q96D71

Applications W, IP Endogenous	Species Cross-Reactivity* H, Mk	Molecular Wt. 125 kDa	Isotype Rabbit IgG**
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**Background:** REPS1 is a RalBP1-associated EH-homology domain containing protein. The sequence of REPS1 has an EH domain, followed by two proline-rich segments, and a C-terminal coiled-coil domain for binding to RalBP1 (1). The EH domain of REPS1 interacts with the NPF motif of Rab11-FIP2, mediates their colocalization to endosome vesicles, and influences EGFR endocytosis (2). The two proline-rich regions of REPS1 are important for binding to the SH3 domain of GRK/GRB2 and further regulate EGFR downstream signaling. The proline-rich regions of REPS1 have also been shown to interact with the SH3 domain of intersectin1 (ITSN1) and contribute to ITSN1/SGIP1/REPS1 complex formation on clathrin-coated pits (3). Three alternatively spliced isoforms of REPS1 have been identified.

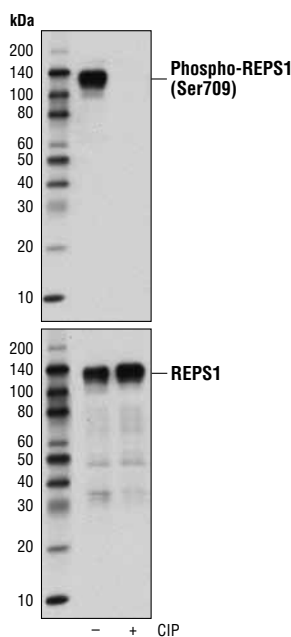
Phosphorylation of REPS1 at Ser709 was identified at Cell Signaling Technology using PTMScan® Technology, our LC-MS/MS platform for phosphorylation site discovery (4).

**Specificity/Sensitivity:** Phospho-REPS1 (Ser709) (D8C1) Rabbit mAb recognizes endogenous levels of REPS1 protein only when phosphorylated at Ser709.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser709 of human REPS1 protein.

## Background References:

- (1) Yamaguchi, A. et al. (1997) *J Biol Chem* 272, 31230-4.
- (2) Cullis, D.N. et al. (2002) *J Biol Chem* 277, 49158-66.
- (3) Dergai, O. et al. (2010) *Biochem Biophys Res Commun* 402, 408-13.
- (4) Rush, J. et al. (2005) *Nat Biotechnol* 23, 94-101.



Western blot analysis of extracts from Jurkat cells, untreated (-) or calf intestinal phosphatase (CIP)-treated (+), using Phospho-REPS1 (Ser709) (D8C1) Rabbit mAb (upper) or REPS1 (D6F4) Rabbit mAb #6404 (lower).

**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.

**\*Species cross-reactivity is determined by western blot.**

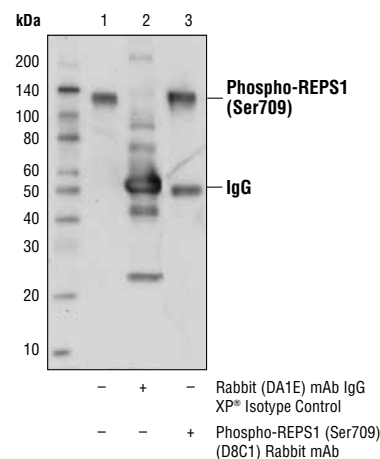
**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

## Recommended Antibody Dilutions:

Western blotting 1:1000  
Immunoprecipitation 1:100

**For product specific protocols please see the web page for this product at [www.cellsignaling.com](http://www.cellsignaling.com).**

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Immunoprecipitation of phospho-REPS1 (Ser709) from Jurkat cell extracts, using Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 2) or Phospho-REPS1 (Ser709) (D8C1) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using Phospho-REPS1 (Ser709) (D8C1) Rabbit mAb.

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

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey 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 All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.