

Eps8 Antibody

✓ 100 µl
(10 western blots)



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New 04/13

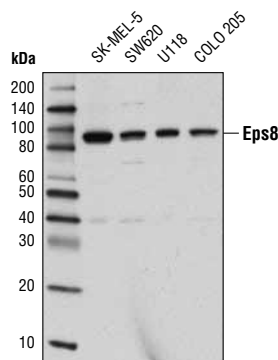
For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IP Endogenous	Species Cross-Reactivity* H	Molecular Wt. 93 kDa	Source Rabbit**
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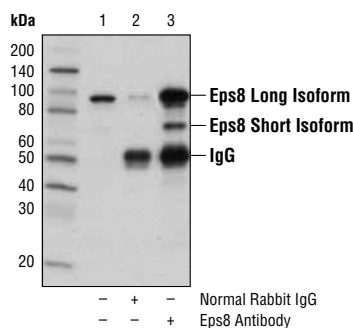
Background: Epidermal growth factor receptor pathway substrate 8 (Eps8) is an adaptor protein and can be phosphorylated by several receptor tyrosine kinases including EGFR and Src (1,2). Eps8 is composed of an N-terminal PTB domain, followed by an SH3 domain and a C-terminal effector domain. Eps8 controls actin-based motility by capping the barbed end of actin and bundling actin subunits through its C-terminal effector domain (3,4). The C-terminal helical structure of Eps8 interacts directly with actin to exert these capping and bundling functions (5). The actin capping activity requires the release of Eps8 autoinhibitory binding through SH3 domain interaction with an adaptor molecule, such as Abi-1 (6). This SH3 domain of Eps8 also binds to RN-tre to regulate the down stream Rab5-mediated endocytosis pathway (6). Eps8 functions by binding several receptor tyrosine kinases, such as EGFR or FGFR, to enhance receptor mediated mitogenic Rac signaling and Rab5 endocytosis (6,7). The effector region of Eps8 is necessary for this process. By association with Abi-1 and forming the Eps8/Abi-1/Sos-1 complex, Eps8 couples initial growth factor stimulation to actin motility and the Rac activation pathway (8,9). Eps8 has been shown to be important in the cellular function of filopodial protrusions, cell migration, microvilli formation, and focal adhesion (10-13). Research studies have demonstrated that through its involvement in actin related cellular functions, Eps8 plays a role in cancer cell growth, survival, motility, and invasiveness (14-18).

Specificity/Sensitivity: Eps8 Antibody recognizes endogenous levels of total human Eps8 protein (both p97 long isoform and p68 short isoform).

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human Eps8 protein. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from various cell lines using Eps8 Antibody.



Immunoprecipitation of Eps8 from SK-MEL-5 cell extracts, using Normal Rabbit IgG Control #2729 (lane 2) or Eps8 Antibody (lane 3). Lane 1 is 10% input. Western blot analysis was performed using Eps8 Antibody.

Entrez-Gene ID #2059
Swiss-Prot Acc. #Q12929

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.

***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.

Please visit www.cellsignaling.com for a complete listing of recommended complementary products.

Background References:

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 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.