

✓ 100 µl  
(10 Western mini-blots)

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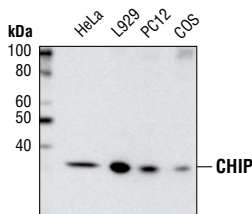
New 06/08

This product is for *in vitro* research use only and is not intended for use in humans or animals.  
 This product is not intended for use as a therapeutic or in diagnostic procedures.

**Entrez-Gene ID** #10273  
**Swiss-Prot Acc.** #Q9UNE7

Applications	Species Cross-Reactivity*	Molecular Wt.	Source	Isotype
W, IP Endogenous	H, M, R, Mk	32 kDa	Rabbit**	IgG

**Background:** The carboxy terminus of Hsc70-interacting protein (CHIP, STUB1) is a co-chaperone protein and functional E3 ubiquitin ligase that links the polypeptide binding activity of Hsp70 to the ubiquitin proteasome system (1). Cytoplasmic CHIP protein contains three 34-amino acid TPR (tetratricopeptide repeat) domains at its amino terminus and a carboxy-terminal U-box domain. CHIP interacts with the molecular chaperones Hsc70-Hsp70 and Hsp90 through its TPR domain, while E3 ubiquitin ligase activity is confined to the U-box domain (2,3). The binding of CHIP to Hsp70 can stall the folding of Hsp70 client proteins and concomitantly facilitate the U-box dependent ubiquitination of Hsp70-bound substrates (4-6). CHIP appears to play a central role in cell stress protection (7) and is responsible for the degradation of disease-related proteins that include cystic fibrosis transmembrane conductance regulator (4), p53 (8), huntingtin and Ataxin-3 (9), Tau protein (10), and  $\alpha$ -synuclein (11).



Western blot analysis of extracts from various cell lines using CHIP (C3B6) Rabbit mAb.

**Specificity/Sensitivity:** CHIP (C3B6) Rabbit mAb detects endogenous levels of total CHIP protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to residues around Leu36 of human CHIP.

**Background References:**

- (1) McDonough, H. and Patterson, C. (2003) *Cell Stress Chaperones* 8, 303-8.
- (2) Ballinger, C.A. et al. (1999) *Mol Cell Biol* 19, 4535-45.
- (3) Murata, S. et al. (2001) *EMBO Rep* 2, 1133-8.
- (4) Meacham, G.C. et al. (2001) *Nat Cell Biol* 3, 100-5.
- (5) Younger, J.M. et al. (2004) *J Cell Biol* 167, 1075-85.
- (6) Jiang, J. et al. (2001) *J Biol Chem* 276, 42938-44.
- (7) Dai, Q. et al. (2003) *EMBO J* 22, 5446-58.
- (8) Esser, C. et al. (2005) *J Biol Chem* 280, 27443-8.
- (9) Jana, N.R. et al. (2005) *J Biol Chem* 280, 11635-40.
- (10) Shimura, H. et al. (2004) *J Biol Chem* 279, 4869-76.
- (11) Shin, Y. et al. (2005) *J Biol Chem* 280, 23727-34.

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

**Companion Products:**

- HSP/Chaperone Antibody Sampler Kit #9965
- HSP70 (D69) Antibody #4876
- HSP70 Antibody #4872
- HSP70 (6B3) Rat mAb #4873
- HSP90 (C45G5) Rabbit mAb #4877
- Phototope®-HRP Western Blot Detection System, Anti-rabbit IgG, HRP-linked Antibody #7071
- Anti-rabbit IgG, HRP-linked Antibody #7074
- Prestained Protein Marker, Broad Range (Premixed Format) #7720
- Biotinylated Protein Ladder Detection Pack #7727
- 20X LumiGLO® Reagent and 20X Peroxide #7003

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**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.**