

#2884 Store at -20°C

ERC1 (P85) Antibody

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID # 23085
Swiss-Prot Acc. # Q8IU2D

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H, M, R, (Mk)	120, 130kDa	Rabbit**

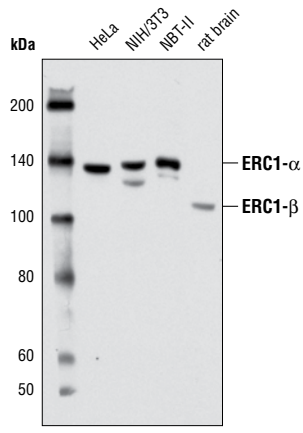
Background: ERC1, an acronym named for previous protein names ELKS (1), RAB6IP2 (2) and CAST (3), is RIM-binding protein that plays a role in neurotransmitter release and general membrane trafficking in other cell types (2-5). Interaction with the GTP-binding protein Rab6 suggests that it contributes to membrane traffic at the Golgi (2). In addition to its association with membrane trafficking, ERC1 has also been found as an essential part of the IκB kinase (IKK) complex required for the activation of NF-κB, perhaps by recruiting IκBα to the IKK complex (6). Alternative splicing of ERC1 generates 2 proteins with a divergent carboxy terminus, a long form ERC1α and a short form ERC1β. ERC1α is widely expressed, whereas ERC1β and a related family member ERC2 are expressed in the brain (4). Papillary thyroid carcinomas have been identified with the translocation t(10;12)(p11;p13) resulting in a fusion between ERC1 and the receptor tyrosine kinase Ret (1).

Specificity/Sensitivity: ERC1 (P85) Antibody detects endogenous levels of ERC1 protein. Both α and β isoforms of ERC1 are detected.

Source/Purification: Polyclonal antibodies are prepared from animals immunized with a synthetic peptide (KLH-coupled) corresponding to residues near the amino terminus of ERC1 protein. Antibodies are purified by peptide affinity chromatography.

Background References:

- (1) Nakata, T. et al. (1999) *Genes Chromosomes Cancer* 25, 97-103.
- (2) Monier, S. et al. (2002) *Traffic* 3, 289-97.
- (3) Ohtsuka, T. et al. (2002) *J Cell Biol* 158, 577-90.
- (4) Wang, Y. et al. (2002) *Proc Natl Acad Sci USA* 99, 14464-9.
- (5) Ohara-Imaizumi, M. et al. (2005) *Mol Biol Cell* 16, 3289-300.
- (6) Ducut Sigala, J.L. et al. (2004) *Science* 304, 1963-7.



Western blot analysis of extracts from HeLa (human), NIH/3T3 (mouse), NBT-II (rat) cell lines and from rat brain using ERC1 (P85) Antibody.

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.

Please visit 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.