

#2885 Store at -20°C

ERC1 α (D1055) Antibody



100 μ l
(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. # Q8IUD2

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H	130 kDa	Rabbit**

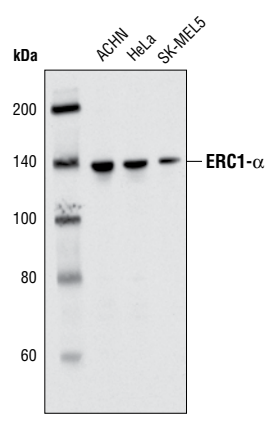
Background: ERC1, an acronym named for previous protein names ELKS (1), RAB6IP2 (2) and CAST (3), is a RIM-binding protein that plays a role in neurotransmitter release and general membrane trafficking in other cell types (2-5). Interaction with the GTP-binding protein Rab6 suggests that it contributes 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 I κ B kinase (IKK) complex required for the activation of NF- κ B, perhaps by recruiting I κ B α to the IKK complex (6). Alternative splicing of ERC1 generates 2 proteins with a divergent carboxy terminus, a long and a short form termed ERC1 α and ERC1 β , respectively. ERC1 α is widely expressed, whereas ERC1 β 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 α (D1055) Antibody detects endogenous levels of the α isoform of human ERC1.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxy terminus of human ERC1 protein, specific for the α isoform. Antibodies were 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 ACHN, HeLa and SK-MEL-5 cells using ERC1 α (D1055) Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/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	1:50

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.

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.