

#2885 Store at -20°C

ERC1α (D1055) Antibody



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	130	Rabbit	#Q8IUD2	23085

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

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.

Specificity / Sensitivity

ERC1α (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

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 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 and a short form termed ERC1α and ERC1β, respectively. 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).

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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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