



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at -20C
#2885

ERC1 α (D1055) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 130	Source/Isotype: Rabbit	UniProt ID: #Q8IUD2	Entrez-Gene Id: 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 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

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

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).

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 $\text{\textcircled{R}}$ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any

purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.