Produktinformation

Forschungsprodukte & Biochemikalien

Zellkultur & Verbrauchsmaterial

Diagnostik & molekulare Diagnostik

Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

ERAL1 (h2): 293T Lysate: sc-171759

SANTA CRUZ®
BIOTECHNOLOGY

The Power to Question

BACKGROUND

In *E. coli*, Era is a GTPase that is crucial for cell cycle progression and proper cell division, playing a key role in cellular proliferation. ERAL1 (Era G-protein-like 1), also known as ERA, ERAL1A, HERA-A, HERA-B or CEGA (conserved ERA-like GTPase), is a 437 amino acid human homolog of Era. Functioning as a probable GTP-binding protein, ERAL1 contains the same structural domains as its yeast counterpart, namely a conserved BoxA sequence, a C-terminal KH domain and an N-terminal GTP-binding domain. Due to the high level of structural similarity with Era, ERAL1 may participate in cell cycle events, including cellular proliferation and cell division. ERAL1 contains one KH type-2 domain and is expressed as two isoforms, designated HERA-A and HERA-B, which are produced due to alternative splicing events.

REFERENCES

1. Gollop, N. and March, P.E. 1991. A GTP-binding protein (Era) has an essential role in growth rate and cell cycle control in *Escherichia coli*. J. Bacteriol. 173: 2265-2270.

2. Sayed, A., Matsuyama, S. and Inouye, M. 1999. Era, an essential *Escherichia coli* small G-protein, binds to the 30S ribosomal subunit. Biochem. Biophys. Res. Commun. 264: 51-54.

3. Chen, X., Chen, S.M., Powell, B.S., Court, D.L. and Ji, X. 1999. Purification, characterization and crystallization of ERA, an essential GTPase from *Escherichia coli*. FEBS Lett. 445: 425-430.

4. Zhao, G., Meier, T.I., Peery, R.B., Matsushima, P. and Skatrud, P.L. 1999. Biochemical and molecular analyses of the C-terminal domain of Era GTPase from *Streptococcus pneumoniae*. Microbiology 145: 791-800.

5. Britton, R.A., Chen, S.M., Wallis, D., Koeuth, T., Powell, B.S., Shaffer, L.G., Largaespada, D., Jenkins, N.A., Copeland, N.G., Court, D.L. and Lupski, J.R. 2000. Isolation and preliminary characterization of the human and mouse homologues of the bacterial cell cycle gene era. Genomics 67: 78-82.

6. Meier, T.I., Peery, R.B., McAllister, K.A. and Zhao, G. 2000. Era GTPase of *Escherichia coli*: binding to 16S rRNA and modulation of GTPase activity by RNA and carbohydrates. Microbiology 146: 1071-1083.

7. Akiyama, T., Gohda, J., Shibata, S., Nomura, Y., Azuma, S., Ohmori, Y., Sugano, S., Arai, H., Yamamoto, T. and Inoue, J. 2001. Mammalian homologue of *E. coli* Ras-like GTPase (ERA) is a possible apoptosis regulator with RNA binding activity. Genes Cells 6: 987-1001.

8. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607435. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: ERAL1 (human) mapping to 17q11.2.

PRODUCT

ERAL1 (h2): 293T Lysate represents a lysate of human ERAL1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

ERAL1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive ERAL1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.