

# ERAL1 (K-12): sc-132675

## 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

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## CHROMOSOMAL LOCATION

Genetic locus: ERAL1 (human) mapping to 17q11.2; Era1 (mouse) mapping to 11 B5.

## SOURCE

ERAL1 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ERAL1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132675 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ERAL1 (K-12) is recommended for detection of ERAL1 isoforms HERA-A and HERA-B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ERAL1 (K-12) is also recommended for detection of ERAL1 isoforms HERA-A and HERA-B in additional species, including equine and bovine.

Suitable for use as control antibody for ERAL1 siRNA (h): sc-94130, ERAL1 siRNA (m): sc-144919, ERAL1 shRNA Plasmid (h): sc-94130-SH, ERAL1 shRNA Plasmid (m): sc-144919-SH, ERAL1 shRNA (h) Lentiviral Particles: sc-94130-V and ERAL1 shRNA (m) Lentiviral Particles: sc-144919-V.

Molecular Weight of ERAL1: 48 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. 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](http://www.scbt.com) or our catalog for detailed protocols and support products.