SANTA CRUZ BIOTECHNOLOGY, INC.

ER71 (N-15): sc-164278



BACKGROUND

ER71 (Ets-related protein 71), also known as ETV2 (ETS translocation variant 2) or ETSRP71, is a 341 amino acid member of the ETS protein family. Localized to the nucleus, ER71 contains one ETS DNA-binding domain which binds to DNA sequences containing the consensus pentanucleotide 5'-CGGA[AT]-3'. The gene encoding ER71 maps to human chromosome 19, which consists of around 63 million bases with over 1,400 genes, making up over 2% of human genomic DNA. Chromosome 19 is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19. Translocations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene Bcl-3.

REFERENCES

- Zimmermann, W., et al. 1988. Chromosomal localization of the carcinoembryonic antigen gene family and differential expression in various tumors. Cancer Res. 48: 2550-2554.
- Brown, T.A. and McKnight, S.L. 1992. Specificities of protein-protein and protein-DNA interaction of GABP-α and two newly defined Ets-related proteins. Genes Dev. 6: 2502-2512.
- LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). Adv. Anat. Pathol. 7: 307-321.

CHROMOSOMAL LOCATION

Genetic locus: ETV2 (human) mapping to 19q13.12; Etv2 (mouse) mapping to 7 B1.

SOURCE

ER71 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ER71 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-164278 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-164278 X, 200 $\mu\text{g}/0.1$ ml.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ER71 (N-15) is recommended for detection of ER71 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

ER71 (N-15) is also recommended for detection of ER71 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ER71 siRNA (h): sc-97091, ER71 siRNA (m): sc-144918, ER71 shRNA Plasmid (h): sc-97091-SH, ER71 shRNA Plasmid (m): sc-144918-SH, ER71 shRNA (h) Lentiviral Particles: sc-97091-V and ER71 shRNA (m) Lentiviral Particles: sc-144918-V.

ER71 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

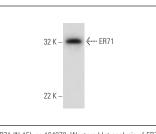
Molecular Weight of ER71: 36 kDa.

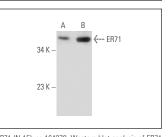
Positive Controls: HeLa whole cell lysate: sc-2200, SK-MEL-28 cell lysate: sc-2236 or c4 whole cell lysate: sc-364186.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA





ER71 (N-15): sc-164278. Western blot analysis of ER71 expression in c4 whole cell lysate.

ER71 (N-15): sc-164278. Western blot analysis of ER71 expression in HeLa (**A**) and SK-MEL-28 (**B**) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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