

ERF (C-20): sc-15435

BACKGROUND

ABT1 (activator of basal transcription 1) is a nuclear protein that associates with the TATA-binding protein (TBP) and enhances basal transcription activity of class II promoters. ABT1 associates with TBP in HeLa nuclear extracts *in vitro*. Another protein, designated ERF, is a member of the Ets family of transcription factors. The members of the Ets family are grouped because they share a highly conserved DNA binding domain. These factors are involved in growth factor pathways and regulate both proliferation and differentiation. ERF (Ets2 repressor factor) is a ubiquitously expressed Ets-domain protein that exhibits strong transcriptional repressor activity, suppresses Ets-induced transformation and is regulated by MAPK phosphorylation. ERF transcription may be regulated by Ets-domain proteins. Additionally, modulation of ERF activity is involved in the transcriptional regulation of genes activated during entry into G₁ phase.

REFERENCES

1. Sgouras, D.N., Athanasiou, M.A., Beal, G.J., Jr., Fisher, R.J., Blair, D.G. and Mavrothalassitis, G.J. 1995. ERF: an Ets domain protein with strong transcriptional repressor activity, can suppress Ets-associated tumorigenesis and is regulated by phosphorylation during cell cycle and mitogenic stimulation. *EMBO J.* 14: 4781-4793.
2. de Castro, C.M., Rabe, S.M., Langdon, S.D., Fleenor, D.E., Slentz-Kesler, K., Ahmed, M.N., Qumsiyeh, M.B. and Kaufman, R.E. 1997. Genomic structure and chromosomal localization of the novel Ets factor, PE-2 (ERF). *Genomics* 42: 227-235.
3. Liu, D., Pavlopoulos, E., Modi, W., Moschonas, N. and Mavrothalassitis, G. 1997. ERF: genomic organization, chromosomal localization and promoter analysis of the human and mouse genes. *Oncogene* 14: 1445-1451.
4. Oda, T., Kayukawa, K., Hagiwara, H., Yudate, H.T., Masuho, Y., Murakami, Y., Tamura, T.A. and Muramatsu, M.A. 2000. A novel TATA-binding protein-binding protein, ABT1, activates basal transcription and has a yeast homolog that is essential for growth. *Mol. Cell. Biol.* 20: 1407-1418.
5. Locuslink Report (LocusID: 29777). <http://www.ncbi.nlm.nih.gov/locuslink/>

CHROMOSOMAL LOCATION

Genetic locus: ERF (human) mapping to 19q13.2; Erf (mouse) mapping to 7 A3.

SOURCE

ERF (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ERF 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-15435 P, (100 µg 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-15435 X, 200 µg/0.1 ml.

APPLICATIONS

ERF (C-20) is recommended for detection of ERF 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).

ERF (C-20) is also recommended for detection of ERF in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ERF siRNA (h): sc-43754, ERF siRNA (m): sc-144923, ERF shRNA Plasmid (h): sc-43754-SH, ERF shRNA Plasmid (m): sc-144923-SH, ERF shRNA (h) Lentiviral Particles: sc-43754-V and ERF shRNA (m) Lentiviral Particles: sc-144923-V.

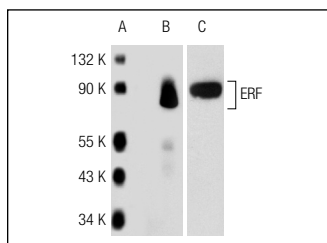
ERF (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ERF: 54 kDa.

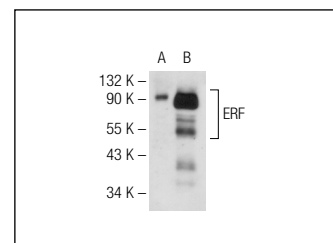
Molecular Weight of phosphorylated ERF: 75-85 kDa.

Positive Controls: ERF (h): 293T Lysate: sc-113734, RAW 264.7 whole cell lysate: sc-2211 or K-562 whole cell lysate: sc-2203.

DATA



ERF (C-20): sc-15435. Western blot analysis of ERF expression in non-transfected: sc-117752 (A), human ERF transfected: sc-113734 (B) 293T whole cell lysates and K-562 whole cell lysate (C).



ERF (C-20): sc-15435. Western blot analysis of ERF expression in non-transfected: sc-117752 (A) and human ERF transfected: sc-159761 (B) 293T whole cell lysates.

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.



Try **ERF (E-9): sc-398269** or **ERF (33L): sc-130372**, our highly recommended monoclonal alternatives to ERF (C-20).