

ABT1 (H-102): sc-292767

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 phospho-rylation 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., 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 (LocusID: 29777). <http://www.ncbi.nlm.nih.gov/locuslink/>

CHROMOSOMAL LOCATION

Genetic locus: ABT1 (human) mapping to 6p22.2; Abt1 (mouse) mapping to 13 A3.1.

SOURCE

ABT1 (H-102) is a rabbit polyclonal antibody raised against amino acids 136-237 mapping within an internal region of ABT1 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.

STORAGE

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

APPLICATIONS

ABT1 (H-102) is recommended for detection of ABT1 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).

ABT1 (H-102) is also recommended for detection of ABT1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ABT1 siRNA (h): sc-105028, ABT1 siRNA (m): sc-140785, ABT1 shRNA Plasmid (h): sc-105028-SH, ABT1 shRNA Plasmid (m): sc-140785-SH, ABT1 shRNA (h) Lentiviral Particles: sc-105028-V and ABT1 shRNA (m) Lentiviral Particles: sc-140785-V.

Molecular Weight of ABT1: 31 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.


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Try **ABT1 (B-9): sc-390233**, our highly recommended monoclonal alternative to ABT1 (H-102).