

# CITED4 (A-21): sc-133461

## BACKGROUND

CITED4 (Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 4), also designated transcriptional coactivator 4, interacts via its C-terminus with the cysteine-histidine-rich domain 1 (CH1) of EP300 (p300) and CREB-binding protein (CBP). CITED4 may inhibit interaction of hypoxia-inducible factor 1 $\alpha$  (HIF-1 $\alpha$ ) with CBP, thus inhibiting transactivation by HIF1A. CITED4 also interacts as a transcriptional coactivator with all isoforms of TFAP2. Nuclear loss or cytoplasmic translocation of CITED4, followed by a loss of HIF-1 $\alpha$  transcriptional antagonist activity, indicates breast cancer development. CITED4 expression occurs in a variety of tissues including heart, liver, skeletal muscle, pancreas and various breast cancer cell lines. CITED4 is highly expressed in embryonic endothelial cells and mammary epithelial cells of pregnant and lactating females, respectively. Regulation of CITED4 may occur through the cell cycle.

## REFERENCES

1. Bragança, J., Swingler, T., Marques, F.I., Jones, T., Eloranta, J.J., Hurst, H.C., Shioda, T. and Bhattacharya, S. 2002. Human CREB-binding protein/p300-interacting transactivator with CITED4, a new member of the CITED family, functions as a co-activator for transcription factor AP-2. *J. Biol. Chem.* 277: 8559-8565.
2. Yahata, T., Takedatsu, H., Dunwoodie, S.L., Bragança, J., Swingler, T., Withington, S.L., Hur, J., Coser, K.R., Isselbacher, K.J., Bhattacharya, S. and Shioda, T. 2002. Cloning of mouse CITED4, a member of the CITED family p300/CBP-binding transcriptional coactivators: induced expression in mammary epithelial cells. *Genomics* 80: 601-613.
3. Fox, S.B., Bragança, J., Turley, H., Campo, L., Han, C., Gatter, K.C., Bhattacharya, S. and Harris, A.L. 2004. CITED4 inhibits hypoxia-activated transcription in cancer cells, and its cytoplasmic location in breast cancer is associated with elevated expression of tumor cell hypoxia-inducible factor 1 $\alpha$ . *Cancer Res.* 64: 6075-6081.

## CHROMOSOMAL LOCATION

Genetic locus: Cited4 (mouse) mapping to 4 D2.2.

## SOURCE

CITED4 (A-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic CITED4 peptide of mouse origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## STORAGE

Store at 4 $^{\circ}$  C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

CITED4 (A-21) is recommended for detection of CITED4 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CITED4 siRNA (m): sc-60388, CITED4 shRNA Plasmid (m): sc-60388-SH and CITED4 shRNA (m) Lentiviral Particles: sc-60388-V.

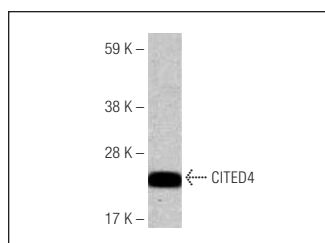
Molecular Weight of CITED4: 25 kDa.

Positive Controls: SP2/0 whole cell lysate.

## 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<sup>TM</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>TM</sup> 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).

## DATA



CITED4 (A-21): sc-133461. Western blot analysis of CITED4 expression in SP2/0 whole cell lysate.

## RESEARCH USE

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