

XTP3TPA (C-15): sc-132501

BACKGROUND

XTP3-transactivated gene A protein (XTP3TPA), also known as RS21-C6, is a 170 amino acid protein. Existing as a homotetramer, XTP3TPA contains an epilepsy-associated repeat (EAR) domain. The EAR domain spans about 44 amino acid residues and is predicted to participate in protein-protein interactions, most likely involved in ligand recognition. XTP3TPA is expressed in embryonic and highly proliferating cells, especially in liver, kidney, ovary and testis, with particularly high expression in cancer cells. One of the identified functions of XTP3TPA is to hydrolyze abnormal nucleotide triphosphates (NTPs) in cancer cells that, if unregulated, could be incorporated into nascent DNA or RNA.

REFERENCES

- Li, Y., et al. 2004. Prokaryotic expression, purification and preparation of polyclonal antibody and immunohistochemistry analysis of RS21-C6 molecule. *Beijing Da Xue Xue Bao* 36: 268-271.
- Moroz, O.V., et al. 2005. Dimeric dUTPases, HisE, and MazG belong to a new superfamily of all-alpha NTP pyrophosphohydrolases with potential "house-cleaning" functions. *J. Mol. Biol.* 347: 243-255.
- Kim, S.H., et al. 2005. Mitogenic estrogen metabolites alter the expression of 17 β -estradiol-regulated proteins including heat shock proteins in human MCF-7 breast cancer cells. *Mol. Cells* 20 378-384.
- Rual, J.F., et al. 2005. Towards a proteome-scale map of the human protein-protein interaction network. *Nature* 437: 1173-1178.
- Lee, S.U., et al. 2006. Protein profiling and transcript expression levels of heat shock proteins in 17 β -estradiol-treated human MCF-7 breast cancer cells. *Cell Biol. Int.* 30: 983-991.
- Wu, B., et al. 2007. Crystal structure of RS21-C6, involved in nucleoside triphosphate pyrophosphohydrolysis. *J. Mol. Biol.* 367: 1405-1412.

CHROMOSOMAL LOCATION

Genetic locus: DCTPP1 (human) mapping to 16p11.2.

SOURCE

XTP3TPA (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of XTP3TPA of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-132501 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

XTP3TPA (C-15) is recommended for detection of XTP3TPA of 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); non cross-reactive with XTP13.

Suitable for use as control antibody for XTP3TPA siRNA (h): sc-93076, XTP3TPA shRNA Plasmid (h): sc-93076-SH and XTP3TPA shRNA (h) Lentiviral Particles: sc-93076-V.

Molecular Weight of XTP3TPA: 19 kDa.

Positive Controls: human kidney tissue or Hep G2 cell lysate: sc-2227.

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.

PROTOCOLS

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