

XTP3TPA (B-6): sc-398501

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- α 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.

CHROMOSOMAL LOCATION

Genetic locus: DCTPP1 (human) mapping to 16p11.2; Dctpp1 (mouse) mapping to 7 F3.

SOURCE

XTP3TPA (B-6) is a mouse monoclonal antibody raised against amino acids 59-125 mapping within an internal region of XTP3TPA of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

XTP3TPA (B-6) is available conjugated to agarose (sc-398501 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398501 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398501 PE), fluorescein (sc-398501 FITC), Alexa Fluor® 488 (sc-398501 AF488), Alexa Fluor® 546 (sc-398501 AF546), Alexa Fluor® 594 (sc-398501 AF594) or Alexa Fluor® 647 (sc-398501 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398501 AF680) or Alexa Fluor® 790 (sc-398501 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

XTP3TPA (B-6) is recommended for detection of XTP3TPA of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for XTP3TPA siRNA (h): sc-93076, XTP3TPA siRNA (m): sc-155395, XTP3TPA shRNA Plasmid (h): sc-93076-SH, XTP3TPA shRNA Plasmid (m): sc-155395-SH, XTP3TPA shRNA (h) Lentiviral Particles: sc-93076-V and XTP3TPA shRNA (m) Lentiviral Particles: sc-155395-V.

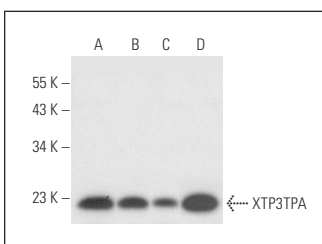
Molecular Weight of XTP3TPA: 19 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

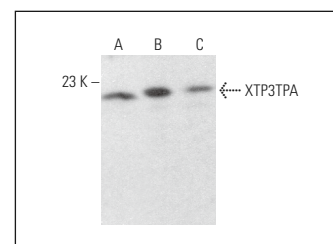
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



XTP3TPA (B-6): sc-398501. Western blot analysis of XTP3TPA expression in Hep G2 (A), HeLa (B), Jurkat (C) and K-562 (D) whole cell lysates.



XTP3TPA (B-6): sc-398501. Western blot analysis of XTP3TPA expression in NIH/3T3 (A), c4 (B) and WEHI-231 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Sarr, A., et al. 2019. Genome-scale CRISPR/Cas9 screen determines factors modulating sensitivity to ProTide NUC-1031. *Sci. Rep.* 9: 7643.
- Manolis, D., et al. 2024. Quantitative proteomics reveals CLR interaction in primary human cells. *J. Biol. Chem.* 300: 107399.

RESEARCH USE

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