

GTPBP6 (V-14): sc-84303

BACKGROUND

GTPBP6 (GTP binding protein 6), also known as PGPL, is a 403 amino acid ubiquitously expressed protein that is highly conserved across species and is encoded by a gene which maps to human chromosomes X and Y. Human chromosome X contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination, as an X and a Y chromosome lead to normal male development, while two copies of an X chromosome lead to normal female development. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

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3. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 300124. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Gianfrancesco, F., et al. 2001. Differential divergence of three human pseudoautosomal genes and their mouse homologs: implications for sex chromosome evolution. *Genome Res.* 11: 2095-2100.
5. Bernardino-Sgherri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
6. Muntoni, F., et al. 2003. Dystrophin and mutations: one gene, several proteins, multiple phenotypes. *Lancet Neurol.* 2: 731-740.
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CHROMOSOMAL LOCATION

Genetic locus: GTPBP6 (human) mapping to Xp22.33/Yp11.32; Gtpbp6 (mouse) mapping to 5 F.

SOURCE

GTPBP6 (V-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of GTPBP6 of human origin.

STORAGE

Store at 4° 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 or our catalog for detailed protocols and support products.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84303 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GTPBP6 (V-14) is recommended for detection of GTPBP6 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).

Suitable for use as control antibody for GTPBP6 siRNA (h): sc-91579, GTPBP6 siRNA (m): sc-145831, GTPBP6 shRNA Plasmid (h): sc-91579-SH, GTPBP6 shRNA Plasmid (m): sc-145831-SH, GTPBP6 shRNA (h) Lentiviral Particles: sc-91579-V and GTPBP6 shRNA (m) Lentiviral Particles: sc-145831-V.

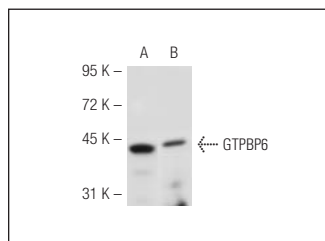
Molecular Weight of GTPBP6: 45 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208 or mouse lung tissue.

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.

DATA



GTPBP6 (V-14): sc-84303. Western blot analysis of GTPBP6 expression in HuT 78 (A) whole cell lysate and mouse lung tissue extract (B).

RESEARCH USE

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