

PTD012 (V-14): sc-136823

BACKGROUND

With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association-dense chromosome. The chromosome 11-encoded *Atm* gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. *Atm* mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and β thalassemia are caused by HBB gene mutations. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the *WT1* gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11. The PTD012 gene product has been provisionally designated PTD012 pending further characterization.

REFERENCES

- Grossfeld, P.D., et al. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. *Am. J. Med. Genet. A* 129: 51-61.
- Loussouarn, G., et al. 2006. KCNQ1 K⁺ channel-mediated cardiac channelopathies. *Methods Mol. Biol.* 337: 167-183.
- Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. *Nature* 440: 497-500.
- Zehelein, J., et al. 2006. Skipping of exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. *J. Biol. Chem.* 281: 35397-35403.
- Ataga, K.I., et al. 2007. β -thalassaemia and sickle cell anaemia as paradigms of hypercoagulability. *Br. J. Haematol.* 139: 3-13.
- Berger, A.C., et al. 2007. The subcellular localization of the Niemann-Pick type C proteins depends on the adaptor complex AP-3. *J. Cell Sci.* 120: 3640-3652.

CHROMOSOMAL LOCATION

Genetic locus: C11orf54 (human) mapping to 11q21; 4931406C07Rik (mouse) mapping to 9 A2.

SOURCE

PTD012 (V-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of PTD012 of human origin.

PRODUCT

Each vial contains 100 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-136823 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

PTD012 (V-14) is recommended for detection of PTD012 isoforms 1-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with PTD015.

PTD012 (V-14) is also recommended for detection of PTD012 isoforms 1-4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PTD012 siRNA (h): sc-96701, 4931406C07Rik siRNA (m): sc-140220, PTD012 shRNA Plasmid (h): sc-96701-SH, 4931406C07Rik shRNA Plasmid (m): sc-140220-SH, PTD012 shRNA (h) Lentiviral Particles: sc-96701-V and 4931406C07Rik shRNA (m) Lentiviral Particles: sc-140220-V.

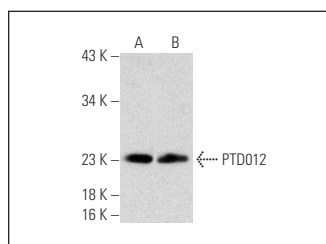
Molecular Weight of PTD012 isoforms: 23-35 kDa.

Positive Controls: PTD012 (h2): 293T Lysate: sc-177798, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

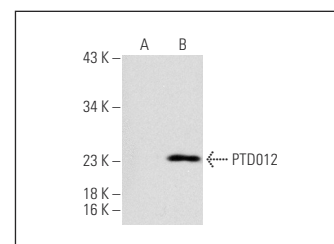
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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



PTD012 (V-14): sc-136823. Western blot analysis of PTD012 expression in Jurkat (A) and Hep G2 (B) whole cell lysates.



PTD012 (V-14): sc-136823. Western blot analysis of PTD012 expression in non-transfected: sc-117752 (A) and human PTD012 transfected: sc-177798 (B) 293T whole cell lysates.

PROTOCOLS

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