# PTD012 (E-14): sc-136821



The Power to Question

## **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  $\beta$  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.

# **CHROMOSOMAL LOCATION**

Genetic locus: C11orf54 (human) mapping to 11q21; 70984 (mouse) mapping to 9 A2.

#### **SOURCE**

PTD012 (E-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of PTD012 of human origin.

## **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136821 P, (100  $\mu$ 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.

## **APPLICATIONS**

PTD012 (E-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  $\mu$ g per 100-500  $\mu$ 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 (E-14) is also recommended for detection of PTD012 isoforms 1-4 in additional species, including equine, canine, bovine and porcine.

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.

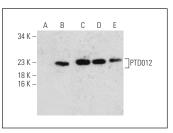
Molecular Weight of PTD012 isoforms: 23-35 kDa.

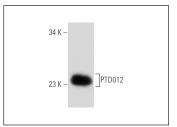
Positive Controls: PTD012 (h2): 293T Lysate: sc-177798, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

#### **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 (E-14): sc-136821. Western blot analysis of PTD012 expression in non-transfected 293T: sc-117752 (**A**), human PTD012 transfected 293T: sc-177798 (**B**), Jurkat (**C**), HeLa (**D**) and Hep G2 (**E**) whole cell Ivsates.

PTD012 (E-14): sc-136821. Western blot analysis of PTD012 expression in mouse embryo tissue extract.

## **RESEARCH USE**

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

#### **PROTOCOLS**

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



Try **PTD012 (E-3): sc-390408**, our highly recommended monoclonal alternative to PTD012 (E-14).

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