

PLC-XD1 (S-15): sc-83938

BACKGROUND

PLC-XD1 (PI-PLC X domain-containing protein 1) is a 323 amino acid enzyme that contains a phosphatidylinositol-specific phospholipase C X domain, which seems to be responsible for its catalytic activity. The gene encoding PLC-XD1 is located in the pseudoautosomal region 1 (PAR1) of X and Y chromosomes, therefore it is most likely inherited as an autosomal gene rather than in a sex-linked fashion. Recombination between pseudoautosomal regions is necessary for the progression of normal spermatogenesis, therefore disruptions of this process may lead to disorders such as male infertility or certain aneuploidy conditions. There are two human homologs of pseudoautosomal regions, PAR1 and PAR2. PAR1 is located at the tips of the short arms while PAR2 is located at the tips of the long arms. PAR1 has been shown to contain several active genes, all of which escape X inactivation. It is thought that these regions are remnants of rearrangement and degradation of the ancestral Y chromosome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLCXD1 (human) mapping to Xp22.33, PLCXD1 (human) mapping to Yp11.32; Plcxd1 (mouse) mapping to 5 F.

SOURCE

PLC-XD1 (S-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of PLC-XD1 of human origin.

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-83938 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PLC-XD1 (S-15) is recommended for detection of PLC-XD1 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).

PLC-XD1 (S-15) is also recommended for detection of PLC-XD1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for PLC-XD1 siRNA (h): sc-91576, PLC-XD1 siRNA (m): sc-152299, PLC-XD1 shRNA Plasmid (h): sc-91576-SH, PLC-XD1 shRNA Plasmid (m): sc-152299-SH, PLC-XD1 shRNA (h) Lentiviral Particles: sc-91576-V and PLC-XD1 shRNA (m) Lentiviral Particles: sc-152299-V.

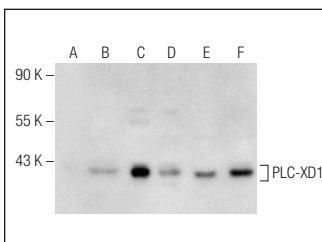
Molecular Weight of PLC-XD1: 37 kDa.

Positive Controls: PLC-XD1 (h): 293T Lysate: sc-370970, AN3 CA cell lysate: sc-24662 or T-47D cell lysate: sc-2293.

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



PLC-XD1 (S-15): sc-83938. Western blot analysis of PLC-XD1 expression in non-transfected 293T: sc-117752 (A), human PLC-XD1 transfected 293T: sc-370970 (B), An3 CA (C), K-562 (D), T-47D (E) and T-47D (F) whole cell lysates.

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.