SANTA CRUZ BIOTECHNOLOGY, INC.

PTPN13LY (N-14): sc-79703

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The protein tyrosine phosphatase (PTP) family of proteins are signaling molecules that regulate processes such as cell growth, cell differentiation, oncogenic transformation and the mitotic cycle. PTPN13LY (PTPN13-like, Y-linked), also known as PRY, PTPN13LY2 or PRY2, is a 147 amino acid protein that localizes to the testis and may function in a similar manner to PTP proteins. The gene encoding PTPN13LY maps to human chromosome Y and is expressed as two alternatively spliced isoforms. Chromosome Y contains approximately 58 million base pairs and houses over 80 genes, many of which are essential for proper sexual development. The Y chromosome is the human sex determining chromosome, necessary for male development and, while deletions or defects in chromosome Y-encoded genes are not lethal, they may greatly impair masculine development and function.

REFERENCES

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8. Waters, P.D., et al. 2007. Mammalian sex–origin and evolution of the Y chromosome and SRY. Semin. Cell Dev. Biol. 18: 389-400.
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CHROMOSOMAL LOCATION

Genetic locus: PRY (human) mapping to Yq11.223.

SOURCE

PTPN13LY (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of PTPN13LY 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.

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

APPLICATIONS

PTPN13LY (N-14) is recommended for detection of PTPN13LY of 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 PTPN13LY siRNA (h): sc-76289, PTPN13LY shRNA Plasmid (h): sc-76289-SH and PTPN13LY shRNA (h) Lentiviral Particles: sc-76289-V.

Molecular Weight of PTPN13LY: 17 kDa.

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.

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.