**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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

PTPN13LY (H-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 3-31 near the N-terminus of PTPN13LY of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PTPN13LY (H-9) is available conjugated to agarose (sc-373748 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373748 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-373748 PE), fluorescein (sc-373748 FITC), Alexa Fluor® 488 (sc-373748 AF488), Alexa Fluor® 546 (sc-373748 AF546), Alexa Fluor® 594 (sc-373748 AF594) or Alexa Fluor® 647 (sc-373748 AF647), 200 µg/ml, for WB (RGB), IF, IHC(fluorescent) and FCM; and to either Alexa Fluor® 680 (sc-373748 AF680) or Alexa Fluor® 790 (sc-373748 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373748 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**

PTPN13LY (H-9) is recommended for detection of PTPN13LY of human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

PTPN13LY (H-9): sc-373748. Immnoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

**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.

**PROTOCOLS**

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