

## Anti-TCPTP/PTPN2 Antibody Picoband™

Catalog Number: A01597-1

### About PTPN2

TCPTP is also called as PTPN2. The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. Epidermal growth factor receptor and the adaptor protein Shc were reported to be substrates of this PTP, which suggested the roles in growth factor mediated cell signaling. Multiple alternatively spliced transcript variants encoding different isoforms have been found. Two highly related but distinctly processed pseudogenes that localize to chromosomes 1 and 13, respectively, have been reported.

### Overview

|                      |                                                                                                                                                                                                   |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name         | Anti-TCPTP/PTPN2 Antibody Picoband™                                                                                                                                                               |
| Reactive Species     | Human                                                                                                                                                                                             |
| Description          | Boster Bio Anti-TCPTP/PTPN2 Antibody Picoband™ catalog # A01597-1. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human.                                             |
| Application          | ELISA, Flow Cytometry, WB                                                                                                                                                                         |
| Clonality            | Polyclonal                                                                                                                                                                                        |
| Formulation          | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .                                                                                                         |
| Storage Instructions | At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing. |
| Host                 | Rabbit                                                                                                                                                                                            |
| Uniprot ID           | P17706                                                                                                                                                                                            |

### Technical Details

|                               |                                                                                                 |
|-------------------------------|-------------------------------------------------------------------------------------------------|
| Immunogen                     | E.coli-derived human TCPTP/PTPN2 recombinant protein (Position: M1-R255).                       |
| Predicted Reactive Species    | Human                                                                                           |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot. |
| Cross Reactivity              | No cross-reactivity with other proteins.                                                        |
| Isotype                       | Rabbit IgG                                                                                      |
| Form                          | Lyophilized                                                                                     |
|                               |                                                                                                 |

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concentration       | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Purification        | Immunogen affinity purified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Suggested Dilutions | <p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.25-0.5 ug/ml, Human</p> <p>Flow Cytometry, 1-3 ug/1x10<sup>6</sup> cells, Human</p> <p>Direct ELISA, 0.1-0.5 ug/ml, Human</p> |

## Anti-TCPTP/PTPN2 Antibody Picoband™ (A01597-1) Images

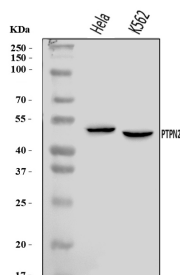


Figure 1. Western blot analysis of TCPTP/PTPN2 using anti-TCPTP/PTPN2 antibody (A01597-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human K562 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TCPTP/PTPN2 antigen affinity purified polyclonal antibody (Catalog # A01597-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TCPTP/PTPN2 at approximately 48 kDa. The expected band size for TCPTP/PTPN2 is at 48 kDa.

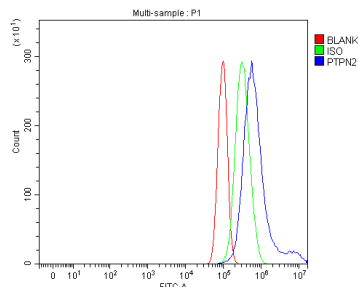


Figure 2. Flow Cytometry analysis of PC-3 cells using anti-TCPTP/PTPN2 antibody (A01597-1).

Overlay histogram showing PC-3 cells stained with A01597-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TCPTP/PTPN2 Antibody (A01597-1, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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