

# Anti-TGIF/TGIF1 Antibody Picoband™

Catalog Number: A04122-1

#### **About TGIF1**

Homeobox protein TGIF1 is a protein that, in humans, is encoded by the TGIF1 gene. The protein encoded by this gene is a member of the three-amino acid loop extension (TALE) superclass of atypical homeodomains. TALE homeobox proteins are highly conserved transcription regulators. This particular homeodomain binds to a previously characterized retinoid X receptor responsive element from the cellular retinol-binding protein II promoter. In addition to its role in inhibiting 9-cis-retinoic acid-dependent RXR alpha transcription activation of the retinoic acid responsive element, the protein is an active transcriptional co-repressor of SMAD2 and may participate in the transmission of nuclear signals during development and in the adult. Mutations in this gene are associated with holoprosencephaly type 4, which is a structural anomaly of the brain. Alternative splicing has been observed at this locus and multiple splice variants encoding distinct isoforms are described.

### Overview

| Product Name         | Anti-TGIF/TGIF1 Antibody Picoband™  |
|----------------------|---|
| Reactive Species     | Human   |
| Description          | Boster Bio Anti-TGIF/TGIF1 Antibody Picoband™ catalog # A04122-1. 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 Na2HPO4.   |
| 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           | Q15583  |

#### **Technical Details**

| Immunogen                     | E.coli-derived human TGIF/TGIF1 recombinant protein (Position: D26-A401).                       |
|-------------------------------|---|
| 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 µg/ml.                       |





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



## Anti-TGIF/TGIF1 Antibody Picoband™ (A04122-1) Images

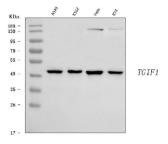


Figure 1. Western blot analysis of TGIF/TGIF1 using anti-TGIF/TGIF1 antibody (A04122-1).

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 A549 whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human Hela whole cell lysates,

Lane 4: human RT4 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-TGIF/TGIF1 antigen affinity purified polyclonal antibody (Catalog # A04122-1) at 0.25 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 TGIF/TGIF1 at approximately 43 kDa. The expected band size for TGIF/TGIF1 is at 43 kDa.

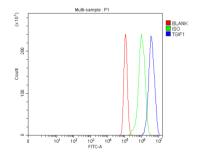


Figure 2. Flow Cytometry analysis of PC-3 cells using anti-TGIF/TGIF1 antibody (A04122-1).

Overlay histogram showing PC-3 cells stained with A04122-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TGIF/TGIF1 Antibody (A04122-1, 1 ug/1x10 $^6$  cells) for 30 min at 20 $^\circ$ C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10 $^6$  cells) was used as secondary antibody for 30 minutes at 20 $^\circ$ C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10 $^6$ ) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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