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Anti-RTF2 Antibody Picoband®

Catalog Number: A16683-1

About RTF2

Replication termination factor 2 is a protein that in humans is encoded by the RTF2 gene. Replication Termination Factor 2, often abbreviated as RTF2, is a protein involved in the regulation and termination of DNA replication processes in eukaryotic cells. It plays a crucial role in ensuring the accurate completion of DNA synthesis during cell division by coordinating the termination of replication forks at specific sites along the DNA strands. RTF2 functions by interacting with other proteins and DNA sequences to facilitate the orderly disassembly of the replication machinery and the prevention of unnecessary re-replication of genomic regions. Its activity is tightly regulated to maintain genomic stability and fidelity, making it a key player in cell cycle control mechanisms. Studies on RTF2 have provided insights into the molecular mechanisms governing DNA replication termination and its implications for cellular function and genome maintenance.

Overview

Product Name	Anti-RTF2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-RTF2 Antibody Picoband® catalog # A16683-1. Tested in ELISA, Flow Cytometry, IP, IF, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IP, IF, ICC, 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	Q9BY42

Technical Details

Immunogen	E.coli-derived human RTF2 recombinant protein (Position: D4-F306). Human RTF2 shares 87.8% and 88.1% amino acid (aa) sequence identity with mouse and rat RTF2, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

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Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Immunoprecipitation, 0.5-2 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10^6 cells, Human ELISA, 0.1-0.5 ug/ml, -

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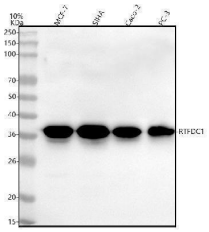
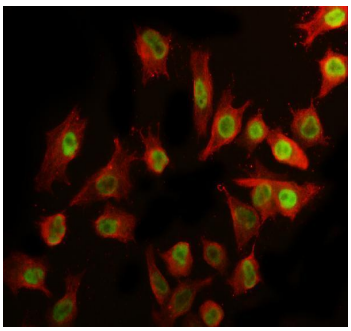
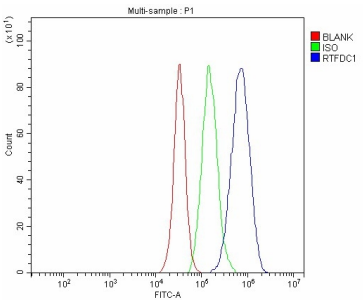
Anti-RTF2 Antibody Picoband® (A16683-1) Images



Western blot analysis of RTF2 using anti-RTF2 antibody (A16683-1). 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 MCF-7 whole cell lysates, Lane 2: human Siha whole cell lysates, Lane 3: human Caco-2 whole cell lysates, Lane 4: human PC-3 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-RTF2 antigen affinity purified polyclonal antibody (Catalog # A16683-1) 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 RTF2 at approximately 37 kDa. The expected band size for RTF2 is at 34 kDa.



IF analysis of RTF2 using anti-RTF2 antibody (A16683-1) and anti-Beta Tubulin antibody (M01857-3). RTF2 was detected in immunocytochemical section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-RTF2 Antibody (A16683-1) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) and DyLight®594 Conjugated Goat Anti-Mouse IgG (BA1141) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of U87 cells using anti-RTF2 antibody (A16683-1). Overlay histogram showing U87 cells stained with A16683-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-RTF2 Antibody (A16683-1, 1 ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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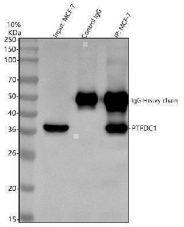

Immunoprecipitating RTF2 in MCF-7 whole cell lysate. Western blot analysis of RTF2 using anti-RTF2 antibody (A16683-1); Lane 1: MCF-7 whole cell lysates (30ug); Lane 2: Rabbit control IgG instead of anti-RTF2 antibody in MCF-7 whole cell lysate; Lane 3: anti-RTF2 antibody (2ug) + MCF-7 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-RTF2 antigen affinity purified polyclonal antibody (A16683-1) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for RTF2 at approximately 37 kDa. The expected band size for RTF2 is at 34 kDa.

Anti-RTF2 Antibody

For Research Use Only. Not for use in diagnostic procedures.