

Anti-Eph receptor A2/EPHA2 Antibody Picoband™

Catalog Number: A00578

About EPHA2

EPHA2 (ephrin type-A receptor 2) also known as ECK, is a protein that in humans is encoded by the EPHA2 gene. This gene belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. By somatic cell hybrid analysis and fluorescence in situ hybridization, the EPHA2 gene is mapped to chromosome 1p36.1. EPHA2 was readily detectable in human lens fiber cells using immunoblot and immunohistochemistry. EGFR and EPHA2 mediated HCV entry by regulating CD81 -claudin-1 (CLDN1) coreceptor associations and viral glycoprotein-dependent membrane fusion.

Overview

Product Name	Anti-Eph receptor A2/EPHA2 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Eph receptor A2/EPHA2 Antibody Picoband™ catalog # A00578. Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P29317

Technical Details

Immunogen	E. coli-derived human Eph receptor A2 recombinant protein (Position: M851-N970).
Predicted Reactive Species	Chicken
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.
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, 0.1-0.5ug/ml</p> <p>Immunocytochemistry/Immunofluorescence, 5ug/ml</p> <p>Flow Cytometry, 1-3ug/1x10⁶ cells</p> <p>Direct ELISA, 0.1-0.5ug/ml</p>

Anti-Eph receptor A2/EPHA2 Antibody Picoband™ (A00578) Images

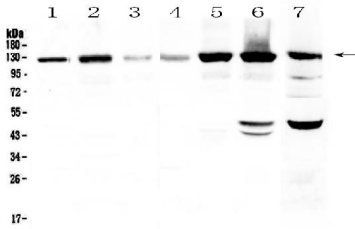


Figure 1. Western blot analysis of Eph receptor A2 using anti-Eph receptor A2 antibody (A00578).

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 50ug of sample under reducing conditions.

Lane 1: human Hela cell lysate,
Lane 2: human U-87MG cell lysate,
Lane 3: human SHG-44 cell lysate,
Lane 4: human COLO-320 cell lysate,
Lane 5: human SK-OV-3 cell lysate,
Lane 6: human A549 cell lysate,
Lane 7: mouse HEPA1-6 cell lysate.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-Eph receptor A2 antigen affinity purified polyclonal antibody (Catalog # A00578) 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 1:10000 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 Eph receptor A2 at approximately 125KD. The expected band size for Eph receptor A2 is at 108KD.

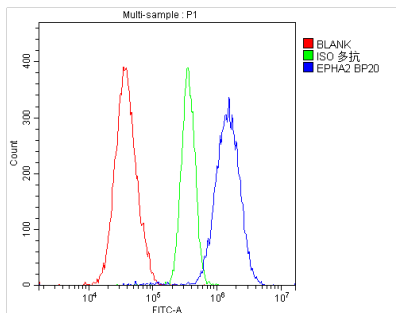


Figure 2. Flow Cytometry analysis of A549 cells using anti-Eph receptor A2 antibody (A00578).

Overlay histogram showing A549 cells stained with A00578 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Eph receptor A2 Antibody (A00578,1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

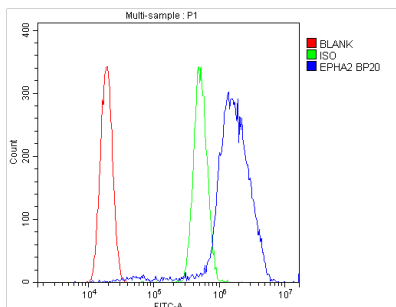


Figure 3. Flow Cytometry analysis of U20S cells using anti-Eph receptor A2 antibody (A00578).

Overlay histogram showing U20S cells stained with A00578 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Eph receptor A2 Antibody (A00578,1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

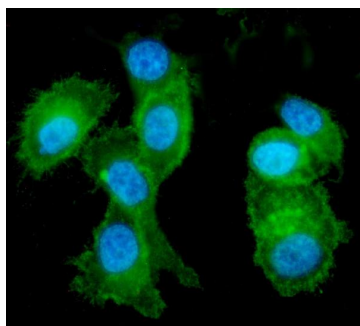


Figure 4. IF analysis of Eph receptor A2 using anti-Eph receptor A2 antibody (A00578). Eph receptor A2 was detected in immunocytochemical section of PC-3 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-Eph receptor A2 Antibody (A00578) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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