

## Anti-HIP1R Antibody Picoband®

Catalog Number: A05059-2

### About HIP1R

Huntingtin-interacting protein 1-related protein is a protein that in humans is encoded by the HIP1R gene. Huntingtin-interacting protein 1-related protein, or HIP1R, was identified on the basis of its structural homology with Huntingtin-interacting protein 1, or HIP1. Based on its domain structure, HIP1R is a putative endocytosis-related protein. Knockdown of HIP1R impairs the endocytosis of activated epidermal growth factor receptor (EGFR) and the consequent activation of the downstream ERK and Akt proteins. Additionally, HIP1R is a component of the clathrin-coated pits and vesicles, which in part links the endocytic machinery to the actin cytoskeleton. It binds to 3-phosphoinositides via ENTH domains to promote cell survival by stabilizing receptor tyrosine kinases following ligand-induced endocytosis. HIP1R deficiency significantly reduces the expression of the ionotropic glutamate receptor GluA1, GluN2A, and GluN2B subunits, but not the GABAA receptor alpha1 subunit. Knockdown of HIP1R reduces the amplitude and frequency of the miniature excitatory postsynaptic current, but not of the miniature inhibitory postsynaptic current. HIP1R has been identified as a protein that can target histone deacetylase-3-mediated neurodegeneration, along with other proteins like NPTX1, NFL, TEX10, and TGFFG.

### Overview

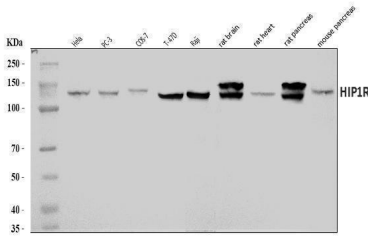
Product Name	Anti-HIP1R Antibody Picoband®
Reactive Species	Human, Monkey, Mouse, Rat
Description	Boster Bio Anti-HIP1R Antibody Picoband® catalog # A05059-2. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat, Monkey. The brand Picoband indicates 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, IF, IHC, ICC, 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	O75146

### Technical Details

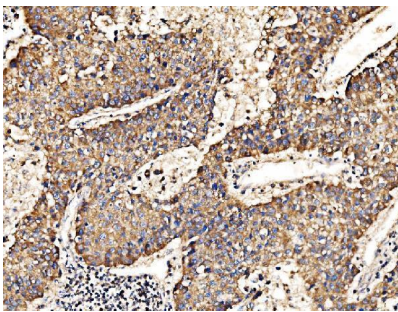
Immunogen	E.coli-derived human HIP1R recombinant protein (Position: E316-E734).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.

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	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat, Monkey Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5 ug/ml, -

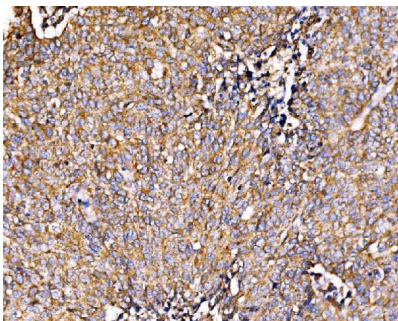
## Anti-HIP1R Antibody Picoband® (A05059-2) Images



Western blot analysis of HIP1R using anti-HIP1R antibody (A05059-2). 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 PC-3 whole cell lysates, Lane 3: monkey COS-7 whole cell lysates, Lane 4: human T-47D whole cell lysates, Lane 5: human Raji whole cell lysates, Lane 6: rat brain tissue lysates, Lane 7: rat heart tissue lysates, Lane 8: rat pancreas tissue lysates, Lane 9: mouse pancreas tissue 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-HIP1R antigen affinity purified polyclonal antibody (Catalog # A05059-2) 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 HIP1R at approximately 120 kDa. The expected band size for HIP1R is at 120 kDa.

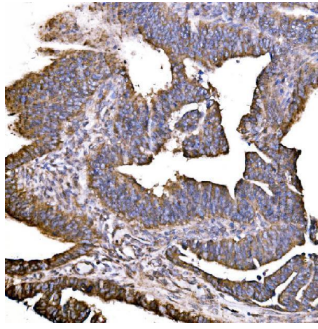


IHC analysis of HIP1R using anti-HIP1R antibody (A05059-2). HIP1R was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HIP1R Antibody (A05059-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

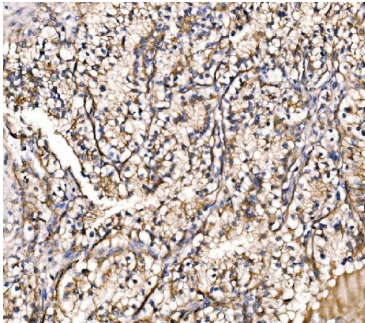


IHC analysis of HIP1R using anti-HIP1R antibody (A05059-2). HIP1R was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HIP1R Antibody (A05059-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

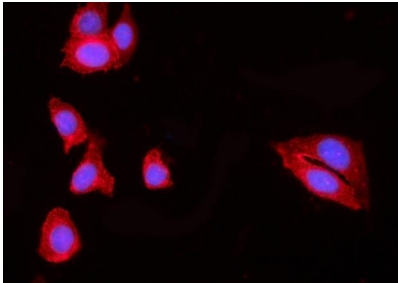
IHC analysis of HIP1R using anti-HIP1R antibody (A05059-2). HIP1R was detected in a paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval



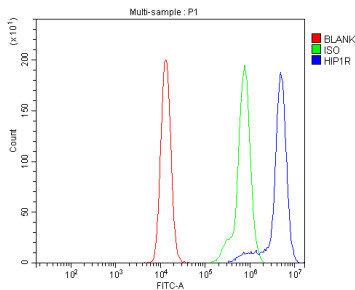
was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HIP1R Antibody (A05059-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of HIP1R using anti-HIP1R antibody (A05059-2). HIP1R was detected in a paraffin-embedded section of human renal clear cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-HIP1R Antibody (A05059-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IF analysis of HIP1R using anti-HIP1R antibody (A05059-2). HIP1R was detected in an immunocytochemical section of MCF-7 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 5 ug/mL rabbit anti-HIP1R Antibody (A05059-2) overnight at 4°C. DyLight®594 Conjugated Goat Anti-Rabbit IgG (BA1142) 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.



Flow Cytometry analysis of Raji cells using anti-HIP1R antibody (A05059-2). Overlay histogram showing Raji cells stained with A05059-2 (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-HIP1R Antibody (A05059-2, 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 without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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### Anti-HIP1R Antibody

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