

## Anti-Clathrin heavy chain/CLTC Antibody Picoband® (monoclonal, 6D3)

Catalog Number: M03134-2

### About CLTC

Clathrin heavy chain 1 is a protein that in humans is encoded by the CLTC gene. Clathrin is a major protein component of the cytoplasmic face of intracellular organelles, called coated vesicles and coated pits. These specialized organelles are involved in the intracellular trafficking of receptors and endocytosis of a variety of macromolecules. The basic subunit of the clathrin coat is composed of three heavy chains and three light chains.

### Overview

Product Name	Anti-Clathrin heavy chain/CLTC Antibody Picoband® (monoclonal, 6D3)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Clathrin heavy chain/CLTC Antibody Picoband® (monoclonal, 6D3) catalog # M03134-2. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. 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	Flow Cytometry, IHC, WB
Clonality	Monoclonal 6D3
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
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	Mouse
Uniprot ID	Q00610

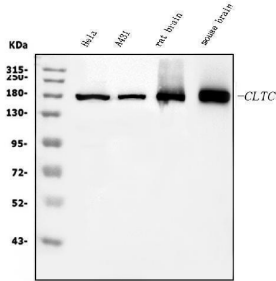
### Technical Details

Immunogen	E.coli-derived human Clathrin heavy chain/CLTC recombinant protein (Position: R967-Q1668).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG2b
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

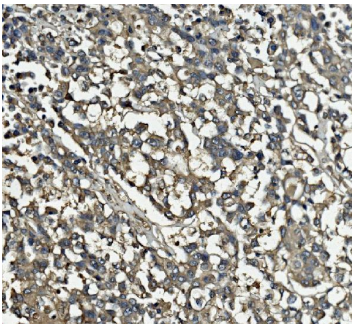
Suggested Dilutions

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

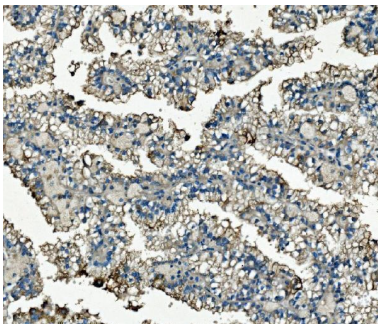
## Anti-Clathrin heavy chain/CLTC Antibody Picoband® (monoclonal, 6D3) (M03134-2) Images



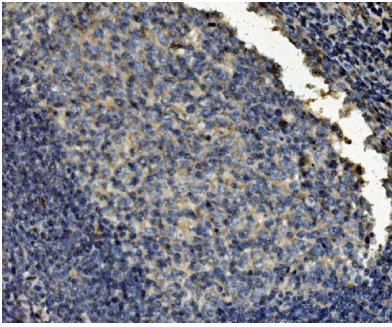
Western blot analysis of Clathrin heavy chain/CLTC using anti-Clathrin heavy chain/CLTC antibody (M03134-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human A431 whole cell lysates, Lane 3: rat brain tissue lysates, Lane 4: mouse brain tissue lysates. 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 mouse anti-Clathrin heavy chain/CLTC antigen affinity purified monoclonal antibody (Catalog # M03134-2) 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-mouse 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 # EK1001) with Tanon 5200 system. A specific band was detected for Clathrin heavy chain/CLTC at approximately 180KD. The expected band size for Clathrin heavy chain/CLTC is at 180KD.



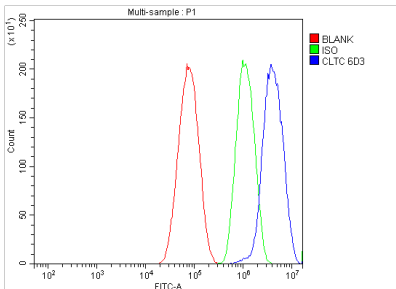
IHC analysis of Clathrin heavy chain/CLTC using anti-Clathrin heavy chain/CLTC antibody (M03134-2). Clathrin heavy chain/CLTC was detected in paraffin-embedded section of human pancreatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml mouse anti-Clathrin heavy chain/CLTC Antibody (M03134-2) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.



IHC analysis of Clathrin heavy chain/CLTC using anti-Clathrin heavy chain/CLTC antibody (M03134-2). Clathrin heavy chain/CLTC was detected in paraffin-embedded section of human renal carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml mouse anti-Clathrin heavy chain/CLTC Antibody (M03134-2) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.



IHC analysis of Clathrin heavy chain/CLTC using anti-Clathrin heavy chain/CLTC antibody (M03134-2). Clathrin heavy chain/CLTC was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml mouse anti-Clathrin heavy chain/CLTC Antibody (M03134-2) overnight at 4°C. Biotinylated goat anti-mouse 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 # SA1021) with DAB as the chromogen.



Flow Cytometry analysis of HepG2 cells using anti-Clathrin heavy chain/CLTC antibody (M03134-2). Overlay histogram showing HepG2 cells stained with M03134-2 (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 mouse anti-Clathrin heavy chain/CLTC Antibody (M03134-2, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1ug/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.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Clathrin heavy chain/CLTC Antibody (monoclonal, 6D3)

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