

Anti-Cathepsin G/CTSG Antibody Picoband®

Catalog Number: PB10053

About CTSG

Cathepsin G is an enzymatic protein belonging to the peptidase or protease families. In humans, it is coded by the CTSG gene. This gene is mapped to 14q12. In transgenic mice, it was found that human Cathepsin G gene was expressed in early myeloid precursors in a manner coordinate with the expression of the endogenous murine gene in the bone marrow and spleen. The protein encoded by this gene, a member of the peptidase S1 protein family, is found in azurophil granules of neutrophilic polymorphonuclear leukocytes. The encoded protease has a specificity similar to that of chymotrypsin C, and may participate in the killing and digestion of engulfed pathogens, and in connective tissue remodeling at sites of inflammation.

Overview

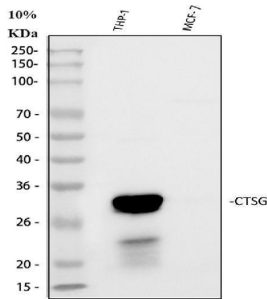
Product Name	Anti-Cathepsin G/CTSG Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Cathepsin G/CTSG Antibody Picoband® catalog # PB10053. Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior 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	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
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	P08311

Technical Details

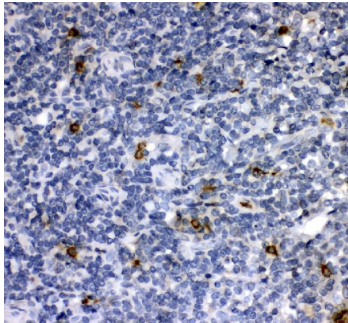
Immunogen	E. coli-derived human Cathepsin G recombinant protein (Position: R25-E252). Human Cathepsin G shares 69.7% amino acid (aa) sequence identity with mouse Cathepsin G.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
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, 0.1-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human

Anti-Cathepsin G/CTSG Antibody Picoband® (PB10053) Images



Western blot analysis of Cathepsin G/CTSG using anti-Cathepsin G/CTSG antibody (PB10053). 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 THP-1 whole cell lysates, Lane 2: human MCF-7 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-Cathepsin G/CTSG antigen affinity purified polyclonal antibody (Catalog # PB10053) 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 Cathepsin G/CTSG at approximately 29 kDa. The expected band size for Cathepsin G/CTSG is at 29 kDa.



IHC analysis of Cathepsin G/CTSG using anti-Cathepsin G/CTSG antibody (PB10053). Cathepsin G/CTSG was detected in a paraffin-embedded section of human tonsil 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-Cathepsin G/CTSG Antibody (PB10053) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Submit a product review to [Biocompare.com](https://www.biocompare.com)

Submit a review of this product to [Biocompare.com](https://www.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-Cathepsin G/CTSG Antibody

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