

Datasheet for ABIN5693310
anti-CLPX antibody (AA 337-574)



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3 Images

Overview

Quantity:	100 µg
Target:	CLPX
Binding Specificity:	AA 337-574
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CLPX antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunohistochemistry (IHC), ELISA, Immunocytochemistry (ICC), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human CLPX recombinant protein (Position: A337-E574).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for CLPX detection. Tested with WB, IHC-P, IHC-F, ICC, FCM, Direct ELISA in Human, Mouse, Rat.

Target Details

Target:	CLPX
Alternative Name:	CLPX (CLPX Products)

Target Details

Background:	<p>Synonyms: ATP-dependent Clp protease ATP-binding subunit clpX-like, mitochondrial, CLPX</p> <p>Tissue Specificity: Higher expression in skeletal muscle and heart and to a lesser extent in liver, brain, placenta, lung, kidney and pancreas.</p> <p>Background: ATP-dependent Clp protease ATP-binding subunit clpX-like, mitochondrial is an enzyme that in humans is encoded by the CLPX gene. This protein is a member of the family of AAA Proteins (AAA+ ATPase) and is to form the protein complex of Clp protease. The protein encoded by this gene is part of a protease found in mitochondria. This protease is ATP-dependent and targets specific proteins for degradation. The protease consists of two heptameric rings of the CLPP catalytic subunit sandwiched between two hexameric rings of the chaperone subunit encoded by this gene. Targeted proteins are unwound by this protein and then passed on to the CLPP subunit for degradation. Two transcript variants, one protein-coding and the other non-protein coding, have been found for this gene.</p>
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UniProt: [O76031](#)

Application Details

Application Notes:	<p>Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(F) and ICC.</p> <p>Application Details: Western blot, 0.1-0.5 µg/mL</p> <p>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/mL</p> <p>Direct ELISA, 0.1-0.5 µg/mL</p> <p>Immunohistochemistry(Frozen Section), 0.5-1 µg/mL</p> <p>Immunocytochemistry, 0.5-1 µg/mL</p> <p>Flow Cytometry, 1-3 µg/1x10⁶ cells</p>
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Restrictions: For Research Use only

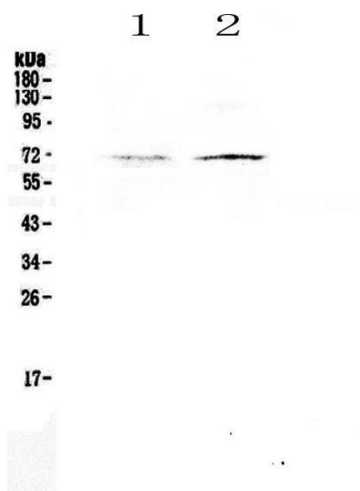
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , 0.05 mg NaN ₃ .
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

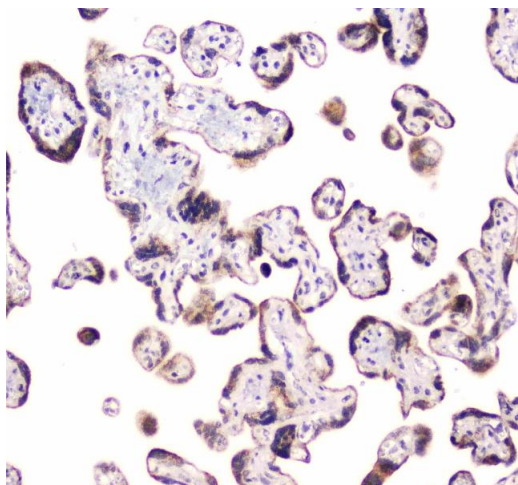
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Images



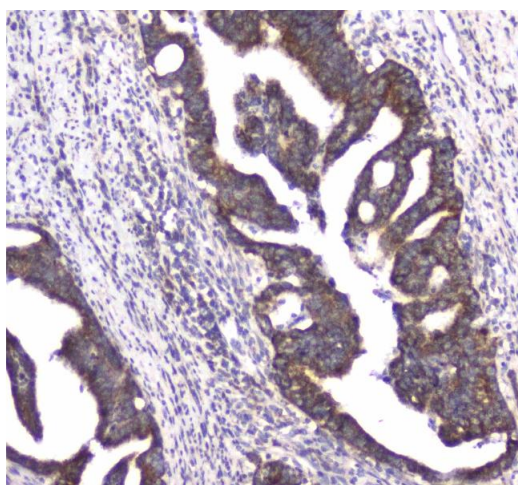
Western Blotting

Image 1. Western blot analysis of CLPX using anti-CLPX antibody . 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 whole cell lysates, Lane 2: human HepG2 whole cell 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 rabbit anti-CLPX antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/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 CLPX at approximately 69KD. The expected band size for CLPX is at 69KD.



Immunohistochemistry

Image 2. IHC analysis of CLPX using anti-CLPX antibody . CLPX was detected in paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-CLPX Antibody 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.



Immunohistochemistry

Image 3. IHC analysis of CLPX using anti-CLPX antibody . CLPX was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-CLPX Antibody 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.