

# Anti-CLPX Rabbit Monoclonal Antibody

Catalog # ABO16302

#### Specification

# **Anti-CLPX Rabbit Monoclonal Antibody - Product Information**

Application WB, IF, ICC **Primary Accession** 076031 Rabbit Host Isotype laG Reactivity Rat, Human, Mouse Clonality Monoclonal Format Liquid Description Anti-CLPX Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

# Anti-CLPX Rabbit Monoclonal Antibody - Additional Information

Gene ID 10845

**Other Names** ATP-dependent Clp protease ATP-binding subunit clpX-like, mitochondrial, CLPX

Calculated MW 69 kDa KDa

Application Details WB 1:500-1:2000<br>ICC/IF 1:50-1:200

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human CLPX

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

# Anti-CLPX Rabbit Monoclonal Antibody - Protein Information

Name CLPX (<u>HGNC:2088</u>)



#### Function

ATP-dependent chaperone that functions as an unfoldase. As part of the ClpXP protease complex, it recognizes specific protein substrates, unfolds them using energy derived from ATP hydrolysis, and then translocates them to the proteolytic subunit (CLPP) of the ClpXP complex for degradation (PubMed:<a href="http://www.uniprot.org/citations/11923310" target="\_blank">11923310</a>, PubMed:<a href="http://www.uniprot.org/citations/22710082" target="\_blank">22710082</a>, PubMed:<a href="http://www.uniprot.org/citations/22710082" target="\_blank">28874591</a>). Thanks to its chaperone activity, it also functions in the incorporation of the pyridoxal phosphate cofactor into 5- aminolevulinate synthase, thereby activating 5-aminolevulinate (ALA) synthesis, the first step in heme biosynthesis (PubMed:<a href="http://www.uniprot.org/citations/22874591" target="\_blank">28874591" target="\_blank">28874591" target="\_blank">28874591</a>). This chaperone is also involved in the control of mtDNA nucleoid distribution, by regulating mitochondrial transcription factor A (TFAM) activity (PubMed:<a href="http://www.uniprot.org/citations/22841477" target="\_blank">22841477</a>).

**Cellular Location** Mitochondrion. Mitochondrion matrix, mitochondrion nucleoid

#### **Tissue Location**

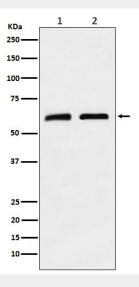
Higher expression in skeletal muscle and heart and to a lesser extent in liver, brain, placenta, lung, kidney and pancreas.

#### Anti-CLPX Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CLPX Rabbit Monoclonal Antibody - Images



Western blot analysis of CLPX expression in (1) A673 cell lysate; (2) Mouse brain lysate.