

CLPX Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP10767b**Specification**

CLPX Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [O76031](#)**CLPX Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 10845**Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CLPX Antibody (C-term) Blocking peptide - Protein Information**Name** CLPX**Function**

ATP-dependent specificity component of the Clp protease complex. Hydrolyzes ATP (PubMed:28874591). Targets specific substrates for degradation by the Clp complex (PubMed:11923310, PubMed:22710082). Can perform chaperone functions in the absence of CLPP. Enhances the DNA-binding activity of TFAM and is required for maintaining a normal mitochondrial nucleoid structure (PubMed:22841477). ATP-dependent unfoldase that stimulates the incorporation of the pyridoxal phosphate cofactor into 5-aminolevulinate synthase, thereby activating 5- aminolevulinate (ALA) synthesis, the first step in heme biosynthesis (PubMed:28874591). Important for efficient erythropoiesis through up- regulation of heme biosynthesis (PubMed:25957689, PubMed:28874591).

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.

CLPX Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

CLPX Antibody (C-term) Blocking peptide - Images**CLPX Antibody (C-term) Blocking peptide - Background**

ATP-dependent specificity component of the Clp protease. It directs the protease to specific substrates. Can perform chaperone functions in the absence of clpP (By similarity).

CLPX Antibody (C-term) Blocking peptide - References

Martin, A., et al. Mol. Cell 29(4):441-450(2008) Bogenhagen, D.F., et al. J. Biol. Chem. 283(6):3665-3675(2008) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :Kang, S.G., et al. J. Biol. Chem. 280(42):35424-35432(2005) Kang, S.G., et al. J. Biol. Chem. 277(23):21095-21102(2002)