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CLPX antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14959

Product Information

Application	WB
Primary Accession	O76031
Other Accession	NM_006660, NP_006651
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69224

Additional Information

Gene ID	10845
Other Names	ATP-dependent Clp protease ATP-binding subunit clpX-like, mitochondrial, CLPX
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CLPX antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CLPX antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

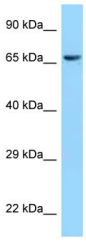
Name	CLPX (HGNC:2088)
Function	ATP-dependent chaperone that functions as an unfoldase. As part of the ClpXP protease complex, it recognizes specific protein substrates, unfolds them using energy derived from ATP hydrolysis, and then translocates them to the proteolytic subunit (CLPP) of the ClpXP complex for degradation (PubMed:11923310, PubMed:22710082, PubMed:28874591). 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:28874591). This chaperone is also involved in the control of mtDNA nucleoid distribution, by regulating mitochondrial transcription factor A (TFAM) activity (PubMed:22841477).

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.

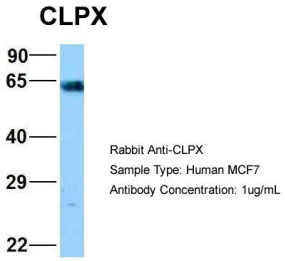
References

Corydon T.J.,et al.Mamm. Genome 11:899-905(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Kang S.G.,et al.J. Biol. Chem. 277:21095-21102(2002).
Kang S.G.,et al.J. Struct. Biol. 148:338-352(2004).

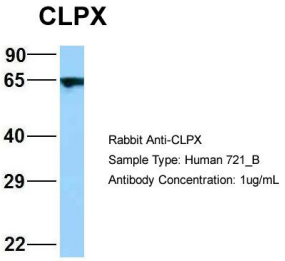
Images



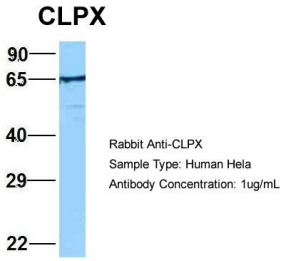
WB Suggested Anti-CLPX Antibody Titration: 1.0 µg/ml
Positive Control: 293T Whole CellCLPX is supported by BioGPS gene expression data to be expressed in HEK293T



Host: Rabbit
Target Name: NOP56
Sample Tissue: MCF7
Antibody Dilution: 1.0µg/mlCLPX is supported by BioGPS gene expression data to be expressed in MCF7



Host: Rabbit
Target Name: WT1
Sample Tissue: 721_B
Antibody Dilution: 1.0µg/mlCLPX is supported by BioGPS gene expression data to be expressed in 721_B



Host: Rabbit
Target Name: EGFL8
Sample Tissue: Hela
Antibody Dilution: 1.0µg/mlCLPX is supported by BioGPS gene expression data to be expressed in HeLa