

PYROXD1 Rabbit pAb

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Catalog # AP57877

Product Information

Application	WB
Primary Accession	Q8WU10
Reactivity	Human, Mouse
Predicted	Rat, Pig, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55793
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PYROXD1
Epitope Specificity	31-130/500
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Additional Information

Gene ID	79912
Other Names	tRNA ligase complex-associated NAD(P)H dehydrogenase PYROXD1, 1.6.99.1, Pyridine nucleotide-disulfide oxidoreductase domain-containing protein 1 {ECO:0000312 HGNC:HGNC:26162}, PYROXD1 (HGNC:26162)
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PYROXD1 (HGNC:26162)
Function	Flavoprotein whose role is to protect RTCB, the catalytic subunit of the tRNA ligase complex (tRNA-LC) involved in tRNA splicing and unfolded protein response, from oxidative inactivation (PubMed: 33930333). It directly binds and shields the catalytic center of RTCB, prior to guanylation, when it is inactive and its active site is vulnerable to oxidation under aerobic conditions. The interaction of PYROXD1 with RTCB is allosterically regulated by NAD(P)H

binding and reduction of its FAD cofactor, while reoxidation of PYROXD1 thanks to its NADPH dehydrogenase activity triggers the timed release of RTCB, enabling its subsequent activation. Thereby, this protective mechanism may also function as a molecular timer, regulating RTCB activation through controlled release (PubMed:[40069351](#)).

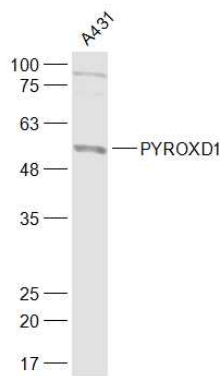
Cellular Location

Nucleus. Cytoplasm, cytosol. Cytoplasm, myofibril, sarcomere

Background

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Images



Sample:

A431(Human) Cell Lysate at 30 ug

Primary: Anti-PYROXD1 (AP57877) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.