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DNAJC10 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18675a

Product Information

Application	WB, E
Primary Accession	Q8IXB1
Other Accession	Q498R3, Q9DC23, NP_061854.1
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38590
Calculated MW	91080
Antigen Region	56-82

Additional Information

Gene ID	54431
Other Names	DnaJ homolog subfamily C member 10, 184-, Endoplasmic reticulum DNA J domain-containing protein 5, ER-resident protein ERdj5, ERdj5, Macrothioredoxin, MTHr, DNAJC10, ERDJ5
Target/Specificity	This DNAJC10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 56-82 amino acids from the N-terminal region of human DNAJC10.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DNAJC10 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DNAJC10 (HGNC:24637)
Function	Endoplasmic reticulum disulfide reductase that collaborates directly with

	the chaperone BIP/HSPA5 (GRP78) to maintain protein quality control by facilitating either the correct folding or the targeted degradation of misfolded proteins (PubMed:12411443, PubMed:23769672, PubMed:37739037). Essential for efficient maturation of newly synthesized polypeptides in the endoplasmic reticulum, binds to substrate proteins and specifically catalyzes the reduction and removal of improper (non-native) disulfide bonds during the folding process (PubMed:23769672, PubMed:37739037). In endoplasmic reticulum- associated degradation (ERAD), DNAJC10 reduces incorrect disulfide bonds specifically in misfolded glycoproteins that have been recognized by EDEM1, a key component of the ERAD pathway, thereby enabling their retrotranslocation and degradation (PubMed:18400946). Promotes apoptotic signaling pathway in response to endoplasmic reticulum stress (PubMed:19122239).
Cellular Location	Endoplasmic reticulum lumen {ECO:0000255|PROSITE- ProRule:PRU10138, ECO:0000269|PubMed:12411443, ECO:0000269|PubMed:23769672}

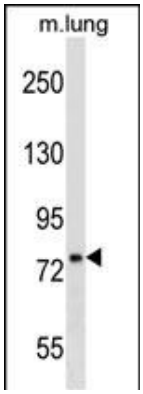
Background

This endoplasmic reticulum co-chaperone may play a role in protein folding and translocation across the endoplasmic reticulum membrane. May act as a co-chaperone for HSPA5.

References

Wang, M., et al. J. Biol. Chem. 284(48):33377-33383(2009)
Thomas, C.G., et al. J. Biol. Chem. 284(10):6282-6290(2009)
Ushioda, R., et al. Science 321(5888):569-572(2008)
Dong, M., et al. Mol. Biol. Cell 19(6):2620-2630(2008)
Hillier, L.W., et al. Nature 434(7034):724-731(2005)

Images



DNAJC10 Antibody (N-term) (Cat. #AP18675a) western blot analysis in mouse lung tissue lysates (35ug/lane).This demonstrates the DNAJC10 antibody detected the DNAJC10 protein (arrow).

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