

DNAJC3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP22323c

Product Information

Application	WB, FC, E
Primary Accession	Q13217
Other Accession	Q9R0T3
Reactivity	Human, Rat, Mouse
Predicted	Human, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB57780
Calculated MW	57580

Additional Information

Gene ID	5611
Other Names	DnaJ homolog subfamily C member 3, Endoplasmic reticulum DNA J domain-containing protein 6, ER-resident protein ERdj6, ERdj6, Interferon-induced, double-stranded RNA-activated protein kinase inhibitor, Protein kinase inhibitor of 58 kDa, Protein kinase inhibitor p58, DNAJC3, P58IPK, PRKRI
Target/Specificity	This DNAJC3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 189-223 amino acids of human DNAJC3.
Dilution	WB~~1:2000 FC~~1:25 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	DNAJC3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DNAJC3
-------------	--------

Synonyms

P58IPK, PRKRI

Function

Involved in the unfolded protein response (UPR) during endoplasmic reticulum (ER) stress. Acts as a negative regulator of the EIF2AK4/GCN2 kinase activity by preventing the phosphorylation of eIF- 2-alpha at 'Ser-52' and hence attenuating general protein synthesis under ER stress, hypothermic and amino acid starving stress conditions (By similarity). Co-chaperone of HSPA8/HSC70, it stimulates its ATPase activity. May inhibit both the autophosphorylation of EIF2AK2/PKR and the ability of EIF2AK2 to catalyze phosphorylation of the EIF2A. May inhibit EIF2AK3/PERK activity.

Cellular Location

Endoplasmic reticulum.

Tissue Location

Widely expressed with high level in the pancreas and testis. Also expressed in cell lines with different levels

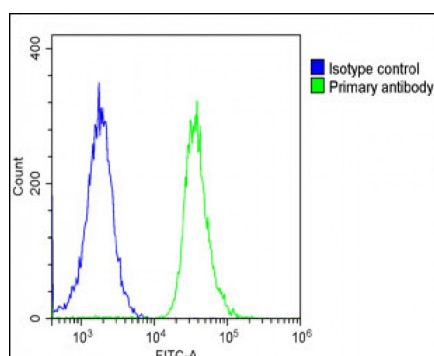
Background

Involved in the unfolded protein response (UPR) during ER stress. Co-chaperone of HSPA8/HSC70, it stimulates its ATPase activity. May inhibit both the autophosphorylation of EIF2AK2/PKR and the ability of EIF2AK2 to catalyze phosphorylation of the EIF2A. May inhibit EIF2AK3/PERK activity.

References

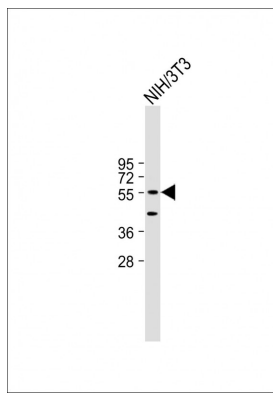
- Korth M.J.,et al.Gene 170:181-188(1996).
Dunham A.,et al.Nature 428:522-528(2004).
Polyak S.J.,et al.J. Biol. Chem. 271:1702-1707(1996).
Gale M.J. Jr.,et al.Mol. Cell. Biol. 18:859-871(1998).
Melville M.W.,et al.J. Biol. Chem. 274:3797-3803(1999).

Images



Overlay histogram showing A431 cells stained with AP22323c(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.

Anti-DNAJC3 Antibody (Center) at 1:2000 dilution + NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 58 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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