

#### DNAJB12 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19585a

#### Specification

## **DNAJB12** Antibody(N-term) - Product Information

Application	WB,E
Primary Accession	<u>Q9NXW2</u>
Other Accession	<u>Q58DR2</u>
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	41860
Antigen Region	7-36

### DNAJB12 Antibody(N-term) - Additional Information

Gene ID 54788

Other Names DnaJ homolog subfamily B member 12, DNAJB12

Target/Specificity

This DNAJB12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-36 amino acids from the N-terminal region of human DNAJB12.

**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** DNAJB12 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## DNAJB12 Antibody(N-term) - Protein Information

Name DNAJB12 {ECO:0000303|PubMed:21150129, ECO:0000312|HGNC:HGNC:14891}



**Function** Acts as a co-chaperone with HSPA8/Hsc70; required to promote protein folding and trafficking, prevent aggregation of client proteins, and promote unfolded proteins to endoplasmic reticulum- associated degradation (ERAD) pathway (PubMed:<u>21148293</u>, PubMed:<u>21150129</u>). Acts by determining HSPA8/Hsc70's ATPase and polypeptide-binding activities (PubMed:<u>21148293</u>). Can also act independently of HSPA8/Hsc70: together with DNAJB14, acts as a chaperone that promotes maturation of potassium channels KCND2 and KCNH2 by stabilizing nascent channel subunits and assembling them into tetramers (PubMed:<u>27916661</u>). While stabilization of nascent channel proteins is dependent on HSPA8/Hsc70, the process of oligomerization of channel subunits is independent of HSPA8/Hsc70 (PubMed:<u>27916661</u>). When overexpressed, forms membranous structures together with DNAJB14 and HSPA8/Hsc70 within the nucleus; the role of these structures, named DJANGOs, is still unclear (PubMed:<u>24732912</u>).

#### **Cellular Location**

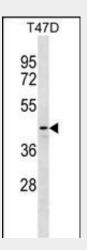
Endoplasmic reticulum membrane; Single-pass membrane protein. Nucleus membrane; Single-pass membrane protein. Note=Localizes to the endoplasmic reticulum membrane (PubMed:21148293, PubMed:21150129, PubMed:24732912, PubMed:27916661) When overexpressed, forms membranous structures in the nucleus (PubMed:24732912).

## DNAJB12 Antibody(N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### DNAJB12 Antibody(N-term) - Images



DNAJB12 Antibody (N-term) (Cat. #AP19585a) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the DNAJB12 antibody detected the DNAJB12 protein (arrow).

## DNAJB12 Antibody(N-term) - Background

DNAJB12 belongs to the evolutionarily conserved DNAJ/HSP40 family of proteins, which regulate molecular chaperone activity by



stimulating ATPase activity. DNAJ proteins may have up to 3 distinct domains: a conserved 70-amino acid J domain, usually at the N terminus; a glycine/phenylalanine (G/F)-rich region; and a cysteine-rich domain containing 4 motifs resembling a zinc finger domain (Ohtsuka and Hata, 2000 [PubMed 11147971]).[supplied by OMIM].

# DNAJB12 Antibody(N-term) - References

Lamesch, P., et al. Genomics 89(3):307-315(2007) Ohtsuka, K., et al. Cell Stress Chaperones 5(2):98-112(2000)