

# DNAJB12 Antibody(N-term) Blocking peptide

Synthetic peptide Catalog # BP19585a

## **Specification**

## DNAJB12 Antibody(N-term) Blocking peptide - Product Information

**Primary Accession** 

Q9NXW2

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

**Gene ID 54788** 

#### **Other Names**

DnaJ homolog subfamily B member 12, DNAJB12

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# DNAIB12 Antibody(N-term) Blocking peptide - Protein Information

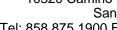
Name DNAJB12 {ECO:0000303|PubMed:21150129, ECO:0000312|HGNC:HGNC:14891}

### **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:<a

href="http://www.uniprot.org/citations/21150129" target="\_blank">21150129</a>, PubMed:<a href="http://www.uniprot.org/citations/21148293" target="\_blank">21148293</a>). Acts by determining HSPA8/Hsc70's ATPase and polypeptide-binding activities (PubMed:<a href="http://www.uniprot.org/citations/21148293" target="\_blank">21148293</a>). 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:<a href="http://www.uniprot.org/citations/27916661" target="\_blank">27916661</a>). While stabilization of nascent channel proteins is dependent on HSPA8/Hsc70, the process of oligomerization of channel subunits is independent of HSPA8/Hsc70 (PubMed:<a href="http://www.uniprot.org/citations/27916661" target="\_blank">27916661</a>). 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:<a href="http://www.uniprot.org/citations/24732912" target="\_blank">24732912</a>/a>).

## **Cellular Location**





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

## DNAJB12 Antibody(N-term) Blocking peptide - Protocols

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

# Blocking Peptides

DNAJB12 Antibody(N-term) Blocking peptide - Images

## DNAJB12 Antibody(N-term) Blocking peptide - Background

DNAIB12 belongs to the evolutionarily conserved DNAI/HSP40family of proteins, which regulate molecular chaperone activity bystimulating ATPase activity. DNAJ proteins may have up to 3distinct domains: a conserved 70-amino acid I domain, usually atthe N terminus; a glycine/phenylalanine (G/F)-rich region; and acysteine-rich domain containing 4 motifs resembling a zinc fingerdomain (Ohtsuka and Hata, 2000 [PubMed 11147971]).[supplied byOMIM].

## DNAJB12 Antibody(N-term) Blocking peptide - References

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