10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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.

DNAJB12 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:21150129, PubMed:21148293). Acts by determining HSPA8/Hsc70's ATPase and polypeptide-binding activities (PubMed:21148293). 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:27916661). While stabilization of nascent channel proteins is dependent on HSPA8/Hsc70, the process of oligomerization of channel subunits is independent of HSPA8/Hsc70 (PubMed:27916661). 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:24732912).

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

DNAJB12 belongs to the evolutionarily conserved DNAJ/HSP40family of proteins, which regulate molecular chaperone activity bystimulating ATPase activity. DNAJ proteins may have up to 3distinct domains: a conserved 70-amino acid J 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)