

## **DDAH2 Antibody (Center) Blocking peptide**

Synthetic peptide Catalog # BP12237c

## **Specification**

# **DDAH2 Antibody (Center) Blocking peptide - Product Information**

**Primary Accession** 

095865

# DDAH2 Antibody (Center) Blocking peptide - Additional Information

**Gene ID 23564** 

#### **Other Names**

N(G), N(G)-dimethylarginine dimethylaminohydrolase 2, DDAH-2, Dimethylarginine dimethylaminohydrolase 2, DDAHII, Dimethylargininase-2, Protein G6a, S-phase protein, DDAH2, DDAH, G6A, NG30

#### **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.

# DDAH2 Antibody (Center) Blocking peptide - Protein Information

Name DDAH2 (HGNC:2716)

Synonyms DDAH, G6A, NG30

# **Function**

Putative hydrolase with unknown substrate (Probable). Does not hydrolyze N(G),N(G)-dimethyl-L-arginine (ADMA) which acts as an inhibitor of NOS (PubMed:<a href="http://www.uniprot.org/citations/37296100" target="\_blank">37296100</a>, PubMed:<a href="http://www.uniprot.org/citations/21493890" target="\_blank">21493890</a>). In endothelial cells, induces expression of vascular endothelial growth factor (VEGF) via phosphorylation of the transcription factor SP1 by PKA in a process that is independent of NO and NO synthase (By similarity). Similarly, enhances pancreatic insulin secretion through SP1-mediated transcriptional up-regulation of secretagogin/SCGN, an insulin vesicle docking protein (By similarity). Upon viral infection, relocates to mitochondria where it promotes mitochondrial fission through activation of DNM1L leading to the inhibition of innate response activation mediated by MAVS (PubMed:<a href="http://www.uniprot.org/citations/33850055" target="\_blank">33850055</a>).

## **Cellular Location**



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Cytoplasm. Mitochondrion Note=Translocates from cytosol to mitochondrion upon IL1B stimulation in chondrocytes

#### **Tissue Location**

Detected in heart, placenta, lung, liver, skeletal muscle, kidney and pancreas, and at very low levels in brain

## DDAH2 Antibody (Center) Blocking peptide - Protocols

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

### Blocking Peptides

DDAH2 Antibody (Center) Blocking peptide - Images

## DDAH2 Antibody (Center) Blocking peptide - Background

This gene belongs to the dimethylargininedimethylaminohydrolase (DDAH) gene family. The encoded enzyme playsa role in nitric oxide generation by regulating cellularconcentrations of methylarginines, which in turn inhibit nitricoxide synthase activity.

## **DDAH2 Antibody (Center) Blocking peptide - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Caplin, B., et al. Kidney Int. 77(5):459-467(2010)Abhary, S., et al. PLoS ONE 5 (3), E9462 (2010) :Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009):