

DDAH2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58056

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O95865
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29644
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DDAH2
Epitope Specificity	41-140/285
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the DDAH family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene belongs to the dimethylarginine dimethylaminohydrolase (DDAH) gene family. The encoded enzyme plays a role in nitric oxide generation by regulating cellular concentrations of methylarginines, which in turn inhibit nitric oxide synthase activity. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	23564
Other Names	N(G), N(G)-dimethylarginine dimethylaminohydrolase 2, DDAH-2, Dimethylarginine dimethylaminohydrolase 2, 3.5.3.18, DDAHII, Dimethylargininase-2, Protein G6a, S-phase protein, DDAH2, DDAH, G6A, NG30
Target/Specificity	Detected in heart, placenta, lung, liver, skeletal muscle, kidney and pancreas, and at very low levels in brain.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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: 21493890 , PubMed: 37296100). 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: 33850055).
Cellular Location	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

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