

Anti-DDAH2 Picoband Antibody

Catalog # ABO11619

Product Information

Application	WB, IHC-P
Primary Accession	O95865
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for N(G),N(G)-dimethylarginine dimethylaminohydrolase 2 (DDAH2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	29644
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm . Mitochondrion . Translocates from cytosol to mitochondrion upon IL-1beta stimulation in chondrocytes.
Tissue Specificity	Detected in heart, placenta, lung, liver, skeletal muscle, kidney and pancreas, and at very low levels in brain. .
Source	Eukaryota
Protein Name	N(G),N(G)-dimethylarginine dimethylaminohydrolase 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human DDAH2 (190-224aa DAAQKAVRAMAVLTDHPYASLTLPDDAAADCLFLR), different from the related mouse and rat sequences by three amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

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

Background

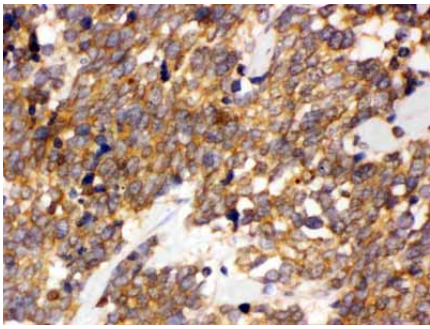
DDAH2 is known as dimethylarginine dimethylaminohydrolase 2 which is mapped to 6p21.3 by radiation hybrid and FISH analysis. This gene encodes a dimethylarginine dimethylaminohydrolase. DDAH2 functions in nitric oxide generation by regulating the cellular concentrations of methylarginines, which in turn inhibit nitric oxide synthase activity. The protein may be localized to the mitochondria. Alternative splicing resulting in multiple transcript variants.

Images

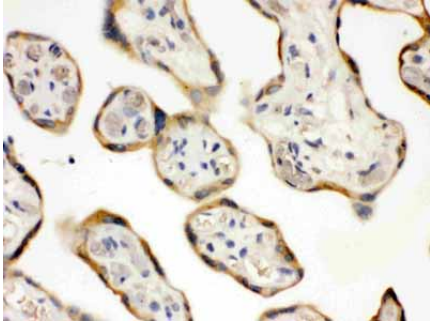


Western blot analysis of DDAH2 expression in rat lung extract (lane 1), mouse lung extract (lane 2) and human placenta extract (lane 3). DDAH2 at 27KD was detected using rabbit anti- DDAH2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11619) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

DDAH2 was detected in paraffin-embedded sections of



human lung cancer tissues using rabbit anti- DDAH2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11619) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



DDAH2 was detected in paraffin-embedded sections of human placenta tissues using rabbit anti- DDAH2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11619) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .

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