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Anti-DDAH2 Picoband Antibody

Catalog # ABO11619

Specification

Anti-DDAH2 Picoband Antibody - 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.

Anti-DDAH2 Picoband Antibody - 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 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/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. .

Protein Name
N(G),N(G)-dimethylarginine dimethylaminohydrolase 2

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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 r˚Constitution, 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.**

Anti-DDAH2 Picoband Antibody - 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

Anti-DDAH2 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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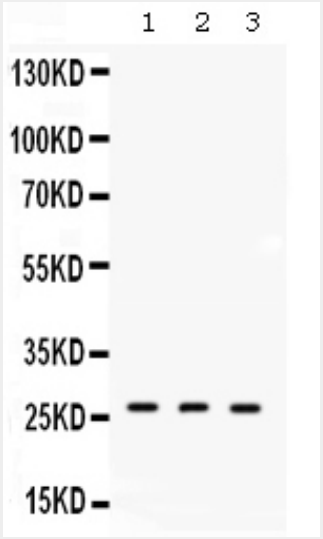
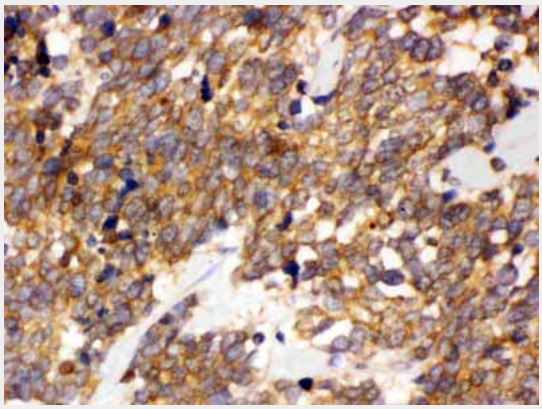
- Flow Cytomety
- Cell Culture

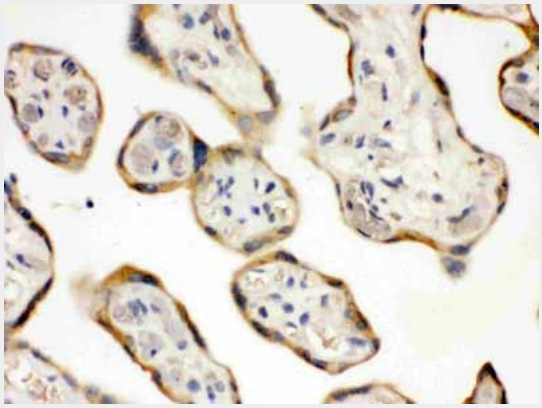
Anti-DDAH2 Picoband Antibody - Images



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 ??g/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 Î¼g/mL. The immunohistochemical section was developed using SABC method .



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DDAH2 was detected in paraffin-embedded sections of human placenta tissues using rabbit anti-DDAH2 Antigen Affinity purified polyclonal antibody (Catalog # ABO11619) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-DDAH2 Picoband Antibody - 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.