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NOS1AP Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP10269c

Specification

NOS1AP Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	O75052
Other Accession	O54960, Q9D3A8, NP_055512.1, NP_001158229.1
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**56150**
Antigen Region	**437-466**

NOS1AP Antibody (Center) - Additional Information

Gene ID 9722

Other Names
Carboxyl-terminal PDZ ligand of neuronal nitric oxide synthase protein, C-terminal PDZ ligand of neuronal nitric oxide synthase protein, Nitric oxide synthase 1 adaptor protein, NOS1AP, CAPON, KIAA0464

Target/Specificity
This NOS1AP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 437-466 amino acids from the Central region of human NOS1AP.

Dilution
WB~~1:1000
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NOS1AP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

NOS1AP Antibody (Center) - Protein Information

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Name NOS1AP (HGNC:16859)

Synonyms CAPON, KIAA0464

Function Adapter protein involved in neuronal nitric-oxide (NO) synthesis regulation via its association with nNOS/NOS1. The complex formed with NOS1 and synapsins is necessary for specific NO and synapsin functions at a presynaptic level. Mediates an indirect interaction between NOS1 and RASD1 leading to enhance the ability of NOS1 to activate RASD1. Competes with DLG4 for interaction with NOS1, possibly affecting NOS1 activity by regulating the interaction between NOS1 and DLG4 (By similarity). In kidney podocytes, plays a role in podosomes and filopodia formation through CDC42 activation (PubMed:33523862).

Cellular Location
Cell projection, filopodium {ECO:0000250|UniProtKB:O54960}. Cell projection, podosome {ECO:0000250|UniProtKB:O54960}

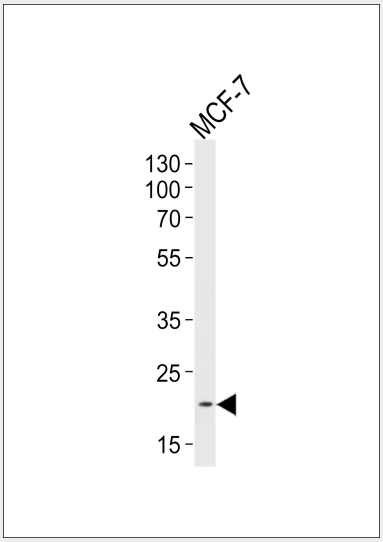
Tissue Location
Expressed in kidney glomeruli podocytes.

NOS1AP Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NOS1AP Antibody (Center) - Images



Western blot analysis of lysate from MCF-7 cell line, using NOS1AP Antibody (Center)(Cat. #AP10269c). AP10269c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

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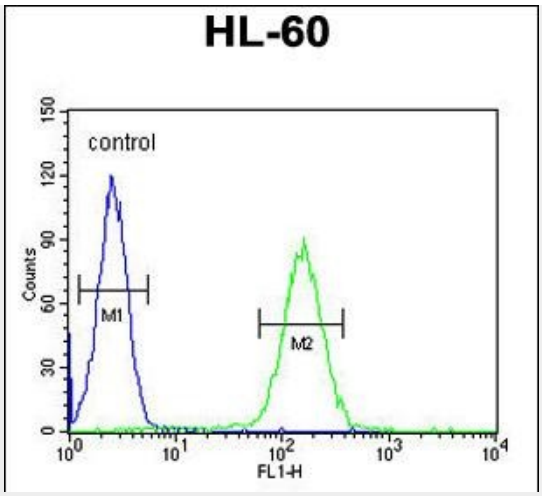

NOS1AP Antibody (Center) (Cat. #AP10269c) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

NOS1AP Antibody (Center) - Background

This gene encodes a cytosolic protein that binds to the signaling molecule, neuronal nitric oxide synthase (nNOS). This protein has a C-terminal PDZ-binding domain that mediates interactions with nNOS and an N-terminal phosphotyrosine binding (PTB) domain that binds to the small monomeric G protein, Dexras1. Studies of the related mouse and rat proteins have shown that this protein functions as an adapter protein linking nNOS to specific targets, such as Dexras1 and the synapsins. Alternative splicing results in multiple transcript variants encoding different isoforms.

NOS1AP Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Lu, J., et al. Diabet. Med. 27(9):1074-1079(2010)
Husted, J.A., et al. Schizophr. Res. 121 (1-3), 187-192 (2010) :
Tomas, M., et al. J. Am. Coll. Cardiol. 55(24):2745-2752(2010)
Delorme, R., et al. BMC Med. Genet. 11, 108 (2010) :