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NOS1AP Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP10269c

Specification

NOS1AP Antibody (Center) Blocking peptide - Product Information

Primary Accession	O75052
Other Accession	NP_055512.1, NP_001158229.1

NOS1AP Antibody (Center) Blocking peptide - 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

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.

NOS1AP Antibody (Center) Blocking peptide - Protein Information

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) Blocking peptide - Protocols

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

- Blocking Peptides

NOS1AP Antibody (Center) Blocking peptide - Images

NOS1AP Antibody (Center) Blocking peptide - Background

This gene encodes a cytosolic protein that binds to thesignaling molecule, neuronal nitric oxide synthase (nNOS). Thisprotein has a C-terminal PDZ-binding domain that mediatesinteractions 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 thisprotein functions as an adapter protein linking nNOS to specifictargets, such as Dexras1 and the synapsins. Alternative splicingresults in multiple transcript variants encoding differentisoforms.

NOS1AP Antibody (Center) Blocking peptide - 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) :