abcam

Product datasheet

Human nNOS (neuronal) (phospho S1417) peptide ab41773

★★★★★ 1 Abreviews 1 References 1 Image

Description

Product name	Human nNOS (neuronal) (phospho S1417) peptide
Accession	P29475
Animal free	No
Nature	Synthetic
Species	Human
Sequence	CNRLRSE(pS)IAFIEESK
Amino acids	1411 to 1425
Modifications	phospho S1417

Specifications

Our **Abpromise guarantee** covers the use of **ab41773** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Immunohistochemistry (Frozen sections) Neutralising Competitive Binding Assays Blocking
Form	Liquid

Preparation and Storage

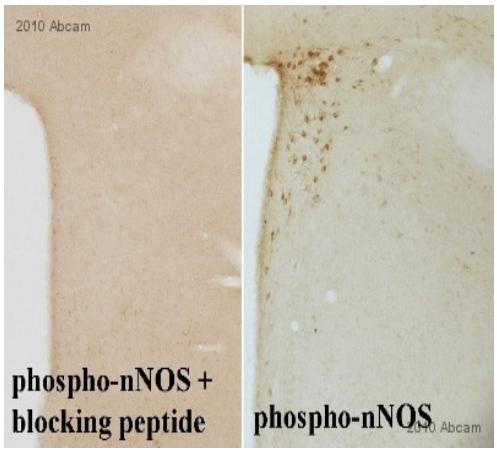
Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

General Info

Function	Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In the brain and peripheral nervous system, NO displays many properties of a neurotransmitter. Probably has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such SRR.

Tissue specificity	Isoform 1 is ubiquitously expressed: detected in skeletal muscle and brain, also in testis, lung and kidney, and at low levels in heart, adrenal gland and retina. Not detected in the platelets. Isoform 3 is expressed only in testis. Isoform 4 is detected in testis, skeletal muscle, lung, and kidney, at low levels in the brain, but not in the heart and adrenal gland.
Sequence similarities	Belongs to the NOS family. Contains 1 FAD-binding FR-type domain. Contains 1 flavodoxin-like domain. Contains 1 PDZ (DHR) domain.
Domain	The PDZ domain in the N-terminal part of the neuronal isoform participates in protein-protein interaction, and is responsible for targeting nNos to synaptic membranes in muscles. Mediates interaction with VAC14.
Post-translational modifications	Ubiquitinated; mediated by STUB1/CHIP in the presence of Hsp70 and Hsp40 (in vitro).
Cellular localization	Cell membrane > sarcolemma. Cell projection > dendritic spine. In skeletal muscle, it is localized beneath the sarcolemma of fast-twitch muscle fiber by associating with the dystrophin glycoprotein complex. In neurons, enriched in dendritic spines.

Images



Immunohistochemistry (Frozen sections) - Human nNOS (neuronal) (phospho S1417) peptide (ab41773)

This image is courtesy of an Abreview submitted by Jose Donato

Ab41773 (at concentrations of 0.25, 0.5 and 1 µg/ml) blocking the labeling of phsopho-nNOS S1416 by **ab5583** (1/500) in mouse tissue sections (paraventricular nuclei of the hypotalamus) by immunohistochemistry (frozen sections). A Biotin-conjugated donkey anti-rabbit IgG polyclonal (1/1000) was used as the secondary antibody.

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