# abcam

# Product datasheet

# Recombinant Human nNOS (neuronal) protein ab159005

1 References 1 Image

**Description** 

Product name Recombinant Human nNOS (neuronal) protein

**Expression system** Wheat germ

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Human

**Sequence** FPGNHEDLVNALIERLEDAPPVNQMVKVELLEERNTALGV

ISNWTDELRL

PPCTIFQAFKYYLDITTPPTPLQLQQFASLATSEKEKQRLLV

LSKGLQEY EEWKWGKNPT

Amino acids 1041 to 1150

Tags GST tag N-Terminus

**Specifications** 

Our Abpromise guarantee covers the use of ab159005 in the following tested applications.

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

**Applications** Western blot

**ELISA** 

Form Liquid

**Additional notes** 

**Preparation and Storage** 

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

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#### **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

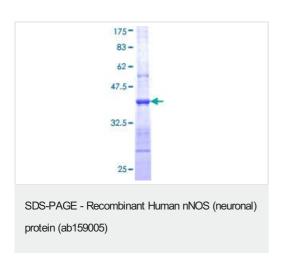
Ubiquitinated; mediated by STUB1/CHIP in the presence of Hsp70 and Hsp40 (in vitro).

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**



ab159005 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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