# abcam

### Product datasheet

## Intracellular Nitric Oxide Synthase Detection Assay Kit ab211085

1 References 2 图像

概述

产品概述

说明

产品名称 Intracellular Nitric Oxide Synthase Detection Assay试剂盒

检**测方法** Fluorescent

样品类型 Adherent cells, Suspension cells

检测类型 Cell-based 检测时间 2h 00m

种属反应性 与反应: Mammals, Other species

Intracellular Nitric Oxide Synthase Detection Assay Kit (ab211085) provides a simple, non-radiometric method for detection of intracellular nitric oxide synthase (NOS) in cells. The kit uses a dye that reacts with intracellular nitric oxide (NO) produced by the cellular NOS in order to produce fluorescence (Ex/Em = 485/530 nm), which is proportional to the concentration of intracellular NOS. Fluorescence can be detected using a microplate reader or a fluorescence microscope.

This product is manufactured by BioVision, an Abcam company and was previously called K207

EZCell™ Intracellular Nitric Oxide Synthase (NOS) Detection Kit. K207-100 is the same size as

the 100 test size of ab211085.

Nitric oxide synthases (EC 1.14.13.39) (NOSs) are a family of enzymes that catalyze the production of nitric oxide (NO) from L-arginine. Nitric oxide (NO) plays an important role in neurotransmission, vascular regulation, immune response and apoptosis. There are three isoforms of NOS: endothelial (eNOS), neuronal (nNOS), and inducible (iNOS). nNOS accounts for the production of NO in central nervous system, where NO participates in cell communication and information storage. eNOS produces NO in blood vessels and is involved with the regulation of vascular function. In contrast to other isoforms, iNOS is expressed de novo under oxidative stress

conditions and produces large amounts of NO as a part of body's defense mechanism.

平台 Microplate reader, Fluorescence microscope

性能

**存放说明** Store at -20°C. Please refer to protocols.

组 <b>件</b>	100 tests
NOS Assay Buffer	1 x 100ml

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组 <b>件</b>	100 tests
Staining Dye (In DMSO)	1 x 20µl

功能	Produces nitric oxide (NO) which is a messenger molecule with diverse functions	s throughout the
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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.

组织特异性 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.

序列相似性 Belongs to the NOS family.

Contains 1 FAD-binding FR-type domain.

Contains 1 flavodoxin-like domain.

Contains 1 PDZ (DHR) domain.

结构域 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.

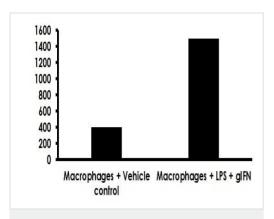
翻译后修饰 Ubiquitinated; mediated by STUB1/CHIP in the presence of Hsp70 and Hsp40 (in vitro).

细胞定位 Cell membrane > sarcolemma. Cell projection > dendritic spine. In skeletal muscle, it is localized

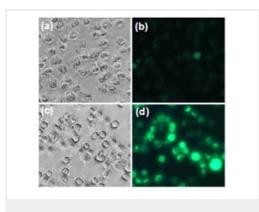
beneath the sarcolemma of fast-twitch muscle fiber by associating with the dystrophin

glycoprotein complex. In neurons, enriched in dendritic spines.

#### 图片



Intraellular Nitric Oxide Synthase Detection Assay Kit (ab211085) Intraellular Nitric Oxide Synthase Detection Assay Kit (ab211085). Nitric Oxide Synthase (NOS)detection in J744.1A macrophages using a microplate reader. Macrophages were cultured overnight and treated the next day with either vehicle control (no stimulation) or LPS (200 ng/mL) and IFN-gamma (100 ng/mL) for 24 hours. After washing with Assay Buffer, cells were stained with the Staining Dye for 1 hour at 37°C. The fluorescence signal was measured at Ex/Em = 485/530 nm.



Intraellular Nitric Oxide Synthase Detection Assay Kit (ab211085)

Intraellular Nitric Oxide Synthase Detection Assay Kit (ab211085). Nitric Oxide Synthase (NOS) detection in J744.1A macrophages using a fluorescence microscope. Macrophages were cultured overnight and treated the next day with either vehicle control (no stimulation) or LPS (200 ng/mL) and IFN-gamma (100 ng/mL) for 24 hours. After washing with Assay Buffer, cells were stained with the Staining Dye for 1 hour at 37°C. Cells were imaged using a Nikon TiE microscope. Control cells (vehicle treated) are shown in the upper panel [(a), (b)]. Treated cells are shown in the lower panel [(c), (d)].

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