abcam

Product datasheet

Anti-Alpha-synuclein (phospho S129) antibody [EP1536Y] - BSA and Azide free ab209422

יעלצעבע RabMAb

★★★★★ 1 Abreviews 19 References 画像数5

製品の概要

製品名 Anti-Alpha-synuclein (phospho S129) antibody [EP1536Y] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EP1536Y] to Alpha-synuclein (phospho S129) - BSA and Azide free

由来種 Rabbit

特異性 This antibody only detects alpha synuclein phosphorylated on Ser129. IHC-P: This antibody

showed no staining in human hippocampus normal brain and showed staining in Parkinson's

brain as expected.

Mouse and rat species are recommended based on WB results, we do not guarantee IHC-FrFI

and IHC-P for Mouse and rat.

アプリケーション 適用あり: IHC-P, ELISA, WB, Dot blot, IHC-FrFI

適用なし: Flow Cyt,IHC-Fr or IP

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

(Peptide available as ab188826)

ポジティブ・コントロール Fetal brain lysate.

特記事項 ab209422 is the carrier-free version of ab51253.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.20

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリモノ モノクローナル **ウローン名** EP1536Y

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab209422の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ELISA		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 18 kDa (predicted molecular weight: 14 kDa).Can be blocked with <u>Alpha-synuclein (phospho S129) peptide (ab188826)</u> .
Dot blot		Use at an assay dependent concentration.
IHC-FrFI	****(1)	Use at an assay dependent concentration.

追加情報

Is unsuitable for Flow Cyt, IHC-Fr or IP.

ターゲット情報

機能

May be involved in the regulation of dopamine release and transport. Induces fibrillization of microtubule-associated protein tau. Reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase-3 activation.

組織特異性

Expressed principally in brain but is also expressed in low concentrations in all tissues examined except in liver. Concentrated in presynaptic nerve terminals.

関連疾患

Genetic alterations of SNCA resulting in aberrant polymerization into fibrils, are associated with several neurodegenerative diseases (synucleinopathies). SNCA fibrillar aggregates represent the major non A-beta component of Alzheimer disease amyloid plaque, and a major component of Lewy body inclusions. They are also found within Lewy body (LB)-like intraneuronal inclusions, glial inclusions and axonal spheroids in neurodegeneration with brain iron accumulation type 1.

Parkinson disease 1 Parkinson disease 4 Dementia Lewy body

配列類似性

Belongs to the synuclein family.

ドメイン

The 'non A-beta component of Alzheimer disease amyloid plaque' domain (NAC domain) is involved in fibrils formation. The middle hydrophobic region forms the core of the filaments. The C-terminus may regulate aggregation and determine the diameter of the filaments.

翻訳後修飾

Phosphorylated, predominantly on serine residues. Phosphorylation by CK1 appears to occur on residues distinct from the residue phosphorylated by other kinases. Phosphorylation of Ser-129 is selective and extensive in synucleinopathy lesions. In vitro, phosphorylation at Ser-129 promoted insoluble fibril formation. Phosphorylated on Tyr-125 by a PTK2B-dependent pathway upon osmotic stress.

Hallmark lesions of neurodegenerative synucleinopathies contain alpha-synuclein that is modified by nitration of tyrosine residues and possibly by dityrosine cross-linking to generated stable oligomers

Ubiquitinated. The predominant conjugate is the diubiquitinated form.

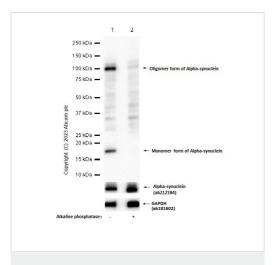
Acetylation at Met-1 seems to be important for proper folding and native oligomeric structure.

細胞内局在

 $\hbox{\it Cytoplasm, cytosol. Membrane. Nucleus. Cell junction, synapse. Secreted. Membrane-bound in}$

dopaminergic neurons.

画像



Western blot - Anti-Alpha-synuclein (phospho S129) antibody [EP1536Y] - BSA and Azide free (ab209422)

All lanes: Anti-Alpha-synuclein (phospho S129) antibody [EP1536Y] (ab51253) at 1/1000 dilution

Lane 1: Mouse brain with Alzheimer's disease tissue lysate
Lane 2: Mouse brain with Alzheimer's disease tissue lysate,
membrane was incubated with alkaline phosphatase

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

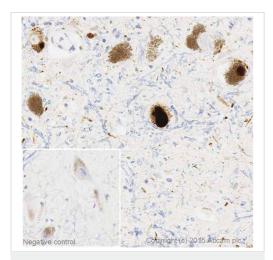
Predicted band size: 14 kDa **Observed band size:** 100,18 kDa

Exposure time: 140 seconds

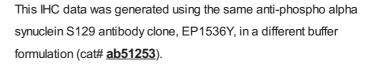
This data was developed using <u>ab51253</u>, the same antibody clone in a different buffer.

Blocking and diluting buffer and concentration: 5% NFDM/TBST This blot was developed using a higher sensitivity ECL substrate. Band around 100kda corresponds to α S oligomer (PMID: 27637918, PMID: 12597857)

Lysates used here were prepared using RIPA method. We recommend 1% SDS hot lysate method to reduce the detection of oligomers. Please refer **here**.



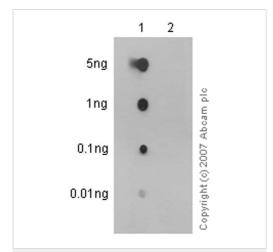
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Alpha-synuclein (phospho S129) antibody [EP1536Y] - BSA and Azide free (ab209422)



IHC image of alpha Synuclein (phospho S129) staining in Human Parkinson Substantia Nigra formalin fixed paraffin embedded tissue section*, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab51253, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay performed on Human normal Substantia Nigra.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



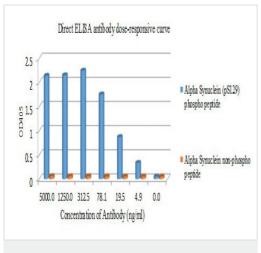
Dot Blot - Anti-Alpha-synuclein (phospho S129) antibody [EP1536Y] - BSA and Azide free (ab209422)

Dot blot analysis of alpha Synuclein (pS129) peptide (Lane 1), alpha Synuclein (unmodified) peptide (Lane 2) labelling alpha Synuclein (pS129) with <u>ab51253</u> at a dilution of 1/1000. Peroxidase conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody at a dilution of 1/2500.

Blocking and dilution buffer: 5% NFDM/TBST.

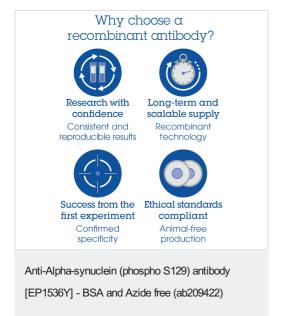
Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51253).



ELISA - Anti-Alpha-synuclein (phospho S129) antibody [EP1536Y] - BSA and Azide free (ab209422) This ELISA data was generated using the same anti-phospho alpha synuclein S129 antibody clone, EP1536Y, in a different buffer formulation (cat# <u>ab51253</u>).

Direct ELISA antibody dose-response curve using <u>ab51253</u>. Antibody concentration of 0-5000 ng/mL. Antigen concentration of 1000 ng/mL. An alkaline phosphatase conjugated goat anti-rabbit lgG (1/1000) was used as the secondary antibody.



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