Product datasheet

Anti-gamma Synuclein/SNCG antibody ab55424

Overview

Product name
Anti-gamma Synuclein/SNCG antibody

Description
Rabbit polyclonal to gamma Synuclein/SNCG

Host species
Rabbit

Specificity
ab55424 detects endogenous levels of total gamma Synuclein/SNCG protein.

Tested applications
Suitable for: IHC-Fr, WB, IHC-P, ELISA, ICC/IF

Species reactivity
Reacts with: Mouse, Rat, Human

Immunogen
Synthetic peptide corresponding to Human gamma Synuclein/SNCG.

Positive control
human lung carcinoma tissue and HT29 cell extract.

Properties

Form
Liquid

Storage instructions
Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer
pH: 7.40
Preservative: 0.02% Sodium azide
Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS
Without Mg+2 and Ca+2

Purity
Immunogen affinity purified

Clonality
Polyclonal

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab55424 in the following tested applications.

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-Fr</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>
Function
Plays a role in neurofilament network integrity. May be involved in modulating axonal architecture during development and in the adult. In vitro, increases the susceptibility of neurofilament-H to calcium-dependent proteases (By similarity). May also function in modulating the keratin network in skin. Activates the MAPK and Elk-1 signal transduction pathway.

Tissue specificity
Highly expressed in brain, particularly in the substantia nigra. Also expressed in the corpus callosum, heart, skeletal muscle, ovary, testis, colon and spleen. Weak expression in pancreas, kidney and lung.

Sequence similarities
Belongs to the synuclein family.

Post-translational modifications
Phosphorylated. Phosphorylation by GRK5 appears to occur on residues distinct from the residue phosphorylated by other kinases.

Cellular localization
Cytoplasm > perinuclear region. Cytoplasm > cytoskeleton > centrosome. Cytoplasm > cytoskeleton > spindle. Associated with centrosomes in several interphase cells. In mitotic cells, localized to the poles of the spindle.

Images

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td><img src="image" alt="1/500 - 1/1000. Detects a band of approximately 13 kDa (predicted molecular weight: 13 kDa)." /></td>
<td></td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ELISA</td>
<td></td>
<td>1/10000.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td><img src="image" alt="Use at an assay dependent concentration." /></td>
<td></td>
</tr>
</tbody>
</table>

**Target**

**Function**
Plays a role in neurofilament network integrity. May be involved in modulating axonal architecture during development and in the adult. In vitro, increases the susceptibility of neurofilament-H to calcium-dependent proteases (By similarity). May also function in modulating the keratin network in skin. Activates the MAPK and Elk-1 signal transduction pathway.

**Tissue specificity**
Highly expressed in brain, particularly in the substantia nigra. Also expressed in the corpus callosum, heart, skeletal muscle, ovary, testis, colon and spleen. Weak expression in pancreas, kidney and lung.

**Sequence similarities**
Belongs to the synuclein family.

**Post-translational modifications**
Phosphorylated. Phosphorylation by GRK5 appears to occur on residues distinct from the residue phosphorylated by other kinases.

**Cellular localization**
Cytoplasm > perinuclear region. Cytoplasm > cytoskeleton > centrosome. Cytoplasm > cytoskeleton > spindle. Associated with centrosomes in several interphase cells. In mitotic cells, localized to the poles of the spindle.

**Images**

**Western blot**

All lanes: Anti-gamma Synuclein/SNCG antibody (ab55424) at 1/500 dilution

Lane 1: HT29 cell extract, without immunizing peptide
Lane 2: HT29 cell extract, with immunizing peptide

Predicted band size: 13 kDa
Observed band size: 13 kDa

**Notes**
- Western blot - Anti-gamma Synuclein/SNCG antibody (ab55424)
ab55424 staining gamma Synuclein in Rat retina cells by ICC/IF (Immunocytochemistry/Immunofluorescence). Cells were fixed with formaldehyde, permeabilized by freezing and blocked with 2% serum for 1 hour at 24°C. Samples were incubated with primary antibody (1/100 in 2% Triton + 2% Serum in PBS) for 8 hours at 4°C. An Alexa Fluor® 594-conjugated Donkey anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody.

Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue using ab55424 (1/50 dilution), in the presence or absence of the immunizing peptide.
ab55424 staining gamma Synuclein/SNCG in Mouse retinal tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with paraformaldehyde and blocked with 5% serum for 1 hour at 25°C. Samples were incubated with primary antibody (1/100 in P) for 12 hours at 4°C. An Alexa Fluor®594-conjugated Donkey anti-rabbit polyclonal (1/1000) was used as the secondary antibody.

ab55424 staining gamma Synuclein/SNCG in murine retinal tissue by Immunohistochemistry (Frozen sections). Tissue was fixed in formaldehyde, blocked using 10% serum for 30 minutes at 24°C, then incubated with ab55424 at a 1/100 dilution for 16 hours at 4°C. The secondary used was an Alexa Fluor 488 conjugated goat anti-rabbit polyclonal used at a 1/1000 dilution.

ab55424 staining gamma Synuclein/SNCG in rat retinal tissue by Immunohistochemistry (Frozen sections). Tissue was fixed in paraformaldehyde, blocked using 10% serum for 30 minutes at 24°C, then incubated with ab55424 at a 1/100 dilution for 16 hours at 4°C. The secondary used was an Alexa Fluor 488 conjugated goat anti-rabbit polyclonal used at a 1/1000 dilution.
Please note: All products are “FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES”

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors