abcam

Product datasheet

Anti-Stathmin 1 (phospho S63) antibody [EPR1574] - BSA and Azide free ab239888

Recombinant RabMAb

4 Images

Overview

Product name	Anti-Stathmin 1 (phospho S63) antibody [EPR1574] - BSA and Azide free
Description	Rabbit monoclonal [EPR1574] to Stathmin 1 (phospho S63) - BSA and Azide free
Host species	Rabbit
Specificity	This antibody only detects Stathmin 1 phosphorylated on Serine 62. The antibody immunogen shares 86% homology with Stathmin-2, therefore it is possible that the antibody will cross-react with Stathmin-2 when phosphorylated at serine 97. This has not been assessed experimentally.
Tested applications	**Suitable for:** IHC-P, IP, Dot blot, WB **Unsuitable for:** Flow Cyt or ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa cell lysates treated with Calyculin A; IHC-P: human brain tissue. IP: HeLa.
General notes	ab239888 is the carrier-free version of **ab76583**. 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 cell-based 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**.

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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1574
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab239888 in the following tested applications.

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

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
Dot blot		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 17 kDa.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

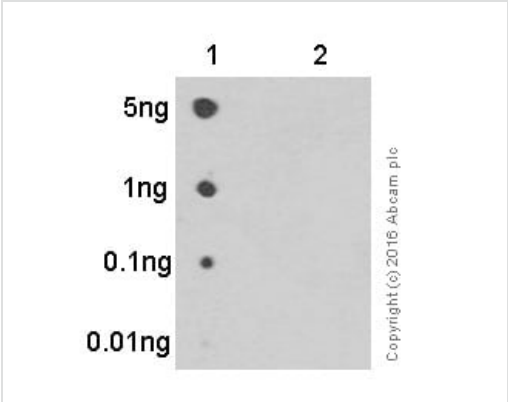
Target

Function Involved in the regulation of the microtubule (MT) filament system by destabilizing microtubules. Prevents assembly and promotes disassembly of microtubules. Phosphorylation at Ser-16 may be required for axon formation during neurogenesis. Involved in the control of the learned and innate fear.

Tissue specificity Ubiquitous. Expression is strongest in fetal and adult brain, spinal cord, and cerebellum, followed by thymus, bone marrow, testis, and fetal liver. Expression is intermediate in colon, ovary,

	placenta, uterus, and trachea, and is readily detected at substantially lower levels in all other tissues examined. Lowest expression is found in adult liver. Present in much greater abundance in cells from patients with acute leukemia of different subtypes than in normal peripheral blood lymphocytes, non-leukemic proliferating lymphoid cells, bone marrow cells, or cells from patients with chronic lymphoid or myeloid leukemia.
Sequence similarities	Belongs to the stathmin family. Contains 1 SLD (stathmin-like) domain.
Post-translational modifications	Many different phosphorylated forms are observed depending on specific combinations among the sites which can be phosphorylated. MAPK is responsible for the phosphorylation of stathmin in response to NGF. Phosphorylation at Ser-16 seems to be required for neuron polarization (By similarity). Phosphorylation at Ser-63 reduces tubulin binding 10-fold and suppresses the MT polymerization inhibition activity.
Cellular localization	Cytoplasm > cytoskeleton.

Images



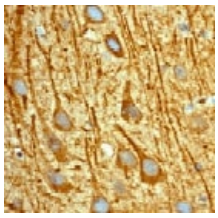
Dot Blot - Anti-Stathmin 1 (phospho S63) antibody [EPR1574] - BSA and Azide free (ab239888)

Dot blot analysis of Stathmin 1 (phospho S63) phospho peptide (Lane 1) and Stathmin 1 non-phospho peptide (Lane 2) labeling Stathmin 1 (phospho S63) with **ab76583** at a dilution of 1/1000. **ab97051** (Peroxidase conjugated goat anti-rabbit IgG) (H+L) at 1/100 000 was used as the secondary antibody.

Blocking and diluting 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 (**ab76583**).

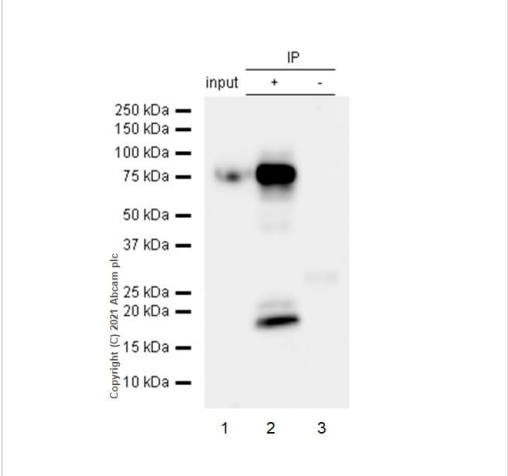


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stathmin 1 (phospho S63) antibody [EPR1574] - BSA and Azide free (ab239888)

ab76583, at a 1/250 dilution, staining Stathmin 1 in paraffin embedded human brain tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76583**).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Stathmin 1 (phospho S63) antibody [EPR1574] - BSA and Azide free (ab239888)

This data was developed using **ab76583**, the same antibody clone in a different buffer formulation.

Stathmin 1 was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) treated with Calyculin A whole cell lysate 10 µg with **ab76583** at 1/50 dilution (2µg). VeriBlot for IP Detection Reagent (HRP)(**ab131366**) was used at 1/5000 dilution.

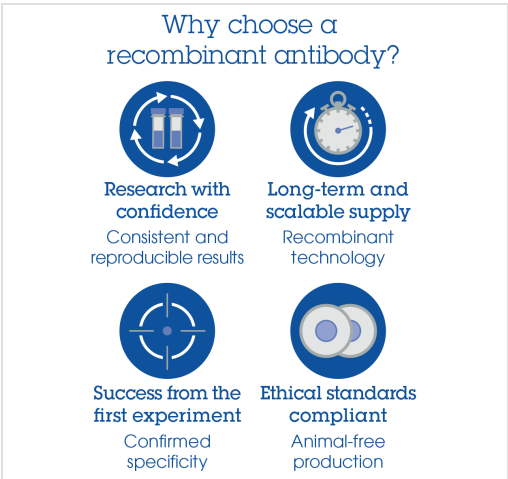
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) treated with Calyculin A whole cell lysate 10 µg

Lane 2: abab76583 IP in HeLa treated with Calyculin A whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab76583** in HeLa treated with Calyculin A whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

75kDa band could be stathmin/alpha tubulin complex. (PMID: 9369201)



Anti-Stathmin 1 (phospho S63) antibody [EPR1574] - BSA and Azide free (ab239888)

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- We provide support in Chinese, English, French, German, Japanese and Spanish
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- We investigate all quality concerns to ensure our products perform to the highest standards

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