abcam

Product datasheet

Anti-Stathmin 1 antibody [EP1573Y] ab52630

Recombinant   RabMAb

★★★★★ **5 Abreviews**   **34 References**   14 Images

Overview

Product name	Anti-Stathmin 1 antibody [EP1573Y]
Description	Rabbit monoclonal [EP1573Y] to Stathmin 1
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Stathmin 1 aa 100 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: **P16949**
Positive control	WB: Human lymph node, Mouse brain, PC-12 whole cell lysates IP: human colon and HeLa cells. IHC-P: lymph node, Human lung carcinoma, Mouse brain, and Rat brain tissue. Flow Cyt (intra): Jurkat cells ICC/IF: HeLa cells
General notes	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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1573Y

Isotype	IgG

Applications

Our **Abpromise guarantee** covers the use of ab52630 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
Flow Cyt (Intra)		1/60. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/100
ICC/IF		1/100 - 1/250.
WB	★★★★★ (2)	1/10000. Detects a band of approximately 19 kDa. **For unpurified use at 1/50000**
IP	★★★★★ (1)	1/30. **For unpurified use at 1/50**
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**

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
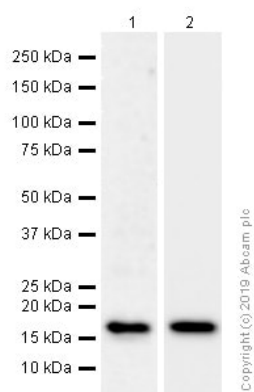
Western blot - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

All lanes : Anti-Stathmin 1 antibody [EP1573Y] (ab52630) at 1/50000 dilution (Purified)
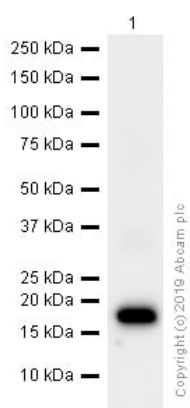
Lane 1 : Mouse brain lysates

Lane 2 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution
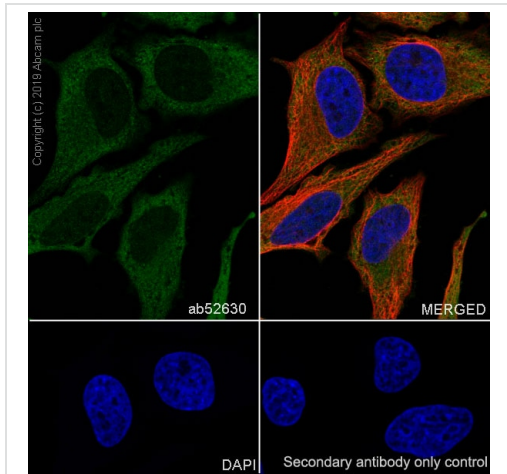
Observed band size: 18 kDa

Western blot - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

Anti-Stathmin 1 antibody [EP1573Y] (ab52630) at 1/10000 dilution (Purified) + Human lymph node lysates at 15 µg
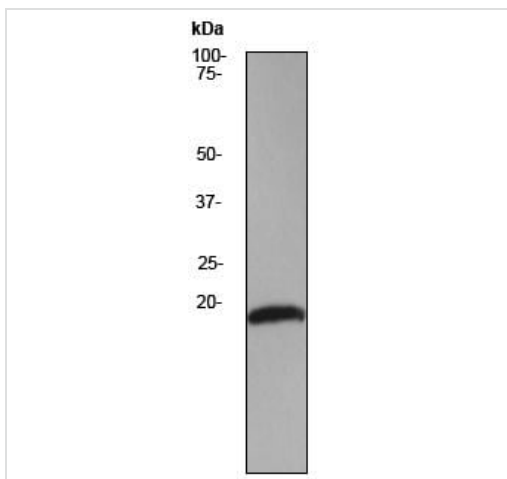
Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Observed band size: 18 kDa

Immunocytochemistry/ Immunofluorescence - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Stathmin 1 with purified ab52630 at 1/200 dilution (3.1 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/ml) dilution. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
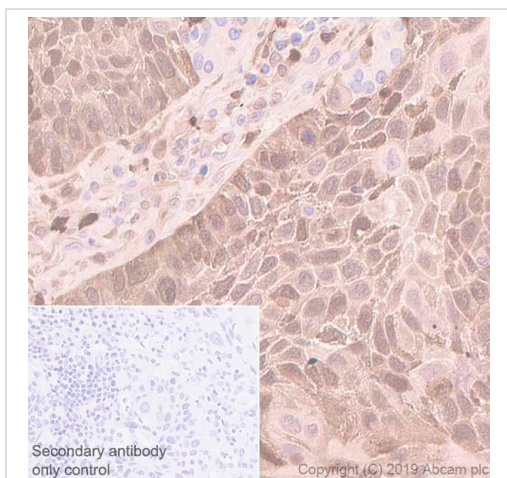

Western blot - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

Anti-Stathmin 1 antibody [EP1573Y] (ab52630) at 1/500000 dilution + PC12 lysate at 10 µg

Secondary
goat anti-rabbit HRP at 1/2000 dilution

Observed band size: 18 kDa

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung carcinoma tissue sections labeling Stathmin 1 with purified ab52630 at 1/2000 dilution (0.31 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
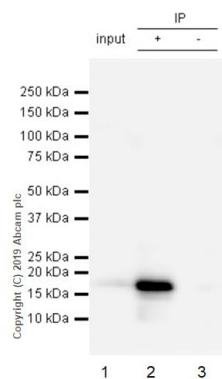
Immunoprecipitation - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

ab52630 (purified) at 1/30 dilution (2ug) immunoprecipitating Stathmin 1 in HeLa whole cell lysates.

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates 10ug
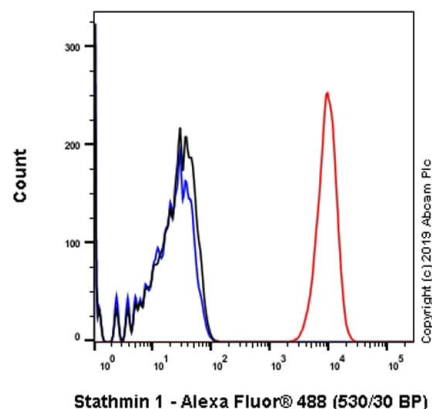
Lane 2 (+): ab52630 & HeLa whole cell lysates

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab52630 in HeLa whole cell lysates

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

Flow Cytometry (Intracellular) - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

Intracellular Flow Cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling Stathmin 1 with purified ab52630 at 1/60 dilution (10μg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).
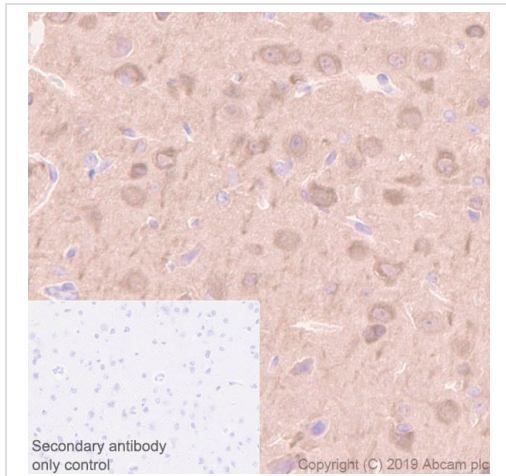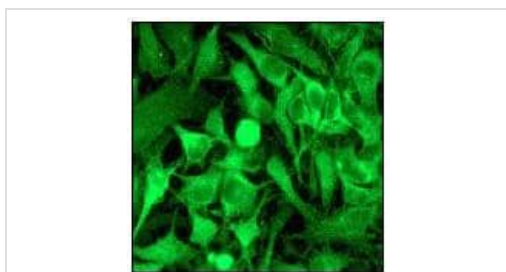
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat brain tissue sections labeling Stathmin 1 with purified ab52630 at 1/2000 dilution (0.31 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
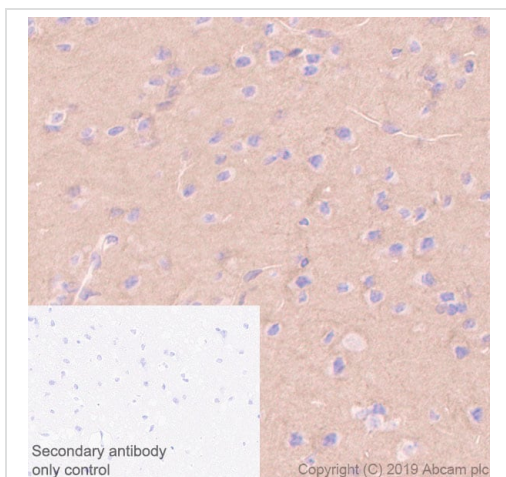
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)
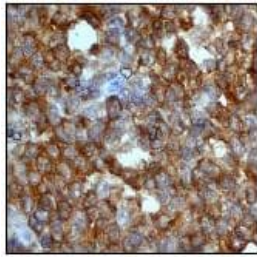
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse brain tissue sections labeling Stathmin 1 with purified ab52630 at 1/2000 dilution (0.31 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunocytochemistry/ Immunofluorescence - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)
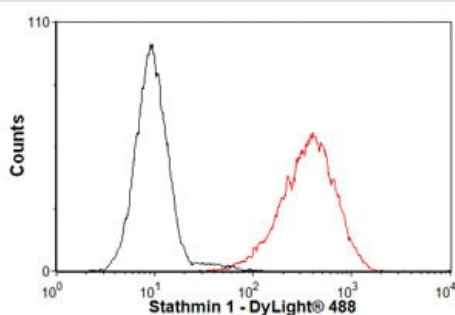
ab52630 stained HeLa cells

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

ab52630, at a 1/250 dilution, staining human Stathmin 1 in lymph node tissue, using Immunohistochemistry, Paraffin embedded sections.

Flow Cytometry (Intracellular) - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

Overlay histogram showing Jurkat cells stained with ab52630 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab52630, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1μg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Jurkat cells fixed with 4% paraformaldehyde/permeabilized in 0.1% PBS-Tween used under the same conditions.
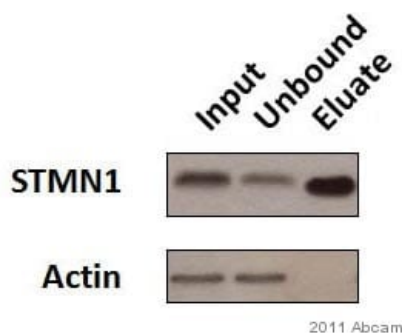
Immunoprecipitation - Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

Image courtesy of Qifeng Lin by Abreview.

Whole cell lysate prepared from human colon cells was loaded at 20μg. The immunoprecipitation step was performed using Protein A/G. ab52630 used at a 1/200 dilution for 12 hours at 4°C. For WB ab52630 used at a 1/10000 dilution.

Why choose a
recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-Stathmin 1 antibody [EP1573Y] (ab52630)

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