abcam

Product datasheet

Anti-ASK1 antibody [EP553Y] - BSA and Azide free ab177030



Recombinant

RabMAb

6 Images

Overview

Product name Anti-ASK1 antibody [EP553Y] - BSA and Azide free

DescriptionRabbit monoclonal [EP553Y] to ASK1 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), ICC/IF, IHC-P, WB

Unsuitable for: IP

Species reactivity Reacts with: Mouse, Human

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

General notes ab177030 is the carrier-free version of <u>ab45178</u>.

Our <u>carrier-free</u> 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 <u>conjugation kits</u> 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**.

1

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EP553Y

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab177030 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) | | Use at an assay dependent concentration. <u>ab199376</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody. |
| ICC/IF | | Use at an assay dependent concentration. |
| IHC-P | | Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. |
| WB | | Use at an assay dependent concentration. Detects a band of approximately 155 kDa (predicted molecular weight: 155 kDa). |

Application notes Is unsuitable for IP.

Target

Function Component of a protein kinase signal transduction cascade. Phosphorylates and activates

MAP2K4 and MAP2K6, which in turn activate the JNK and p38 MAP kinases, respectively.

Overexpression induces apoptotic cell death.

Tissue specificity Abundantly expressed in heart and pancreas.

Sequence similarities Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase

kinase subfamily.

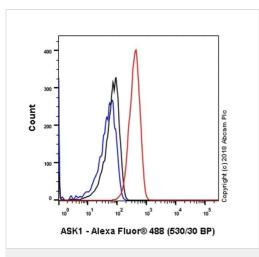
Contains 1 protein kinase domain.

Post-translational

modifications

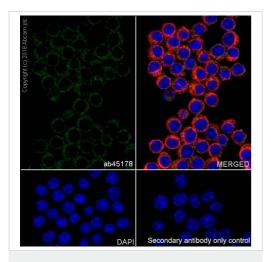
Dephosphorylated and activated by PGAM5.

Images



Flow Cytometry (Intracellular) - Anti-ASK1 antibody [EP553Y] - BSA and Azide free (ab177030)

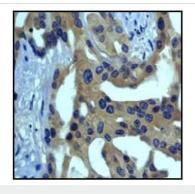
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling ASK1 with purified $\underline{ab45178}$ at 1/100 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit lgG (Alexa Fluor $^{@}$ 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ($\underline{ab45178}$).



Immunocytochemistry/ Immunofluorescence - Anti-ASK1 antibody [EP553Y] - BSA and Azide free (ab177030)

Immunocytochemistry/ Immunofluorescence analysis of RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) cells labeling ASK1 with Purified <u>ab45178</u> at 1:100 (9.9 μg/ml). Cells were fixed in 100% Methanol. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 ?g/ml). Goat anti rabbit lgG (Alexa Fluor? 488, <u>ab150077</u>) was used as the secondary antibody at 1:1000 (2 ?g/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab45178).

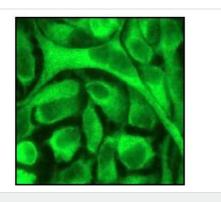


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ASK1 antibody [EP553Y] - BSA and Azide free (ab177030)

Unpurified <u>ab45178</u> (1/10) staining human ASK1 in human lung carcinoma by immunohistochemistry using paraffin embedded tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab45178).

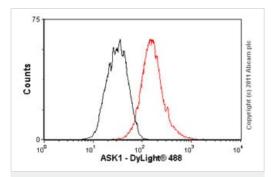
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-ASK1 antibody [EP553Y] - BSA and Azide free (ab177030)

Immunofluorescent staining of HeLa cells using unpurified <u>ab45178</u> (1/10).

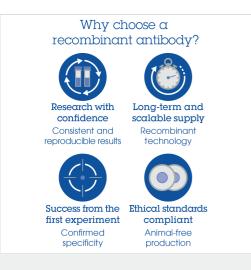
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab45178).



Flow Cytometry (Intracellular) - Anti-ASK1 antibody [EP553Y] - BSA and Azide free (ab177030)

Overlay histogram showing HeLa cells stained with unpurified ab45178 (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 (ab45178, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was a goat anti-rabbit DyLight® 488 (lgG H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab45178).



Anti-ASK1 antibody [EP553Y] - BSA and Azide free (ab177030)

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