abcam

Product datasheet

Anti-TPP1 antibody [3B1] ab54685

★★★★★ **1 Abreviews**   **13 References**   3 Images

Overview

Product name	Anti-TPP1 antibody [3B1]
Description	Mouse monoclonal [3B1] to TPP1
Host species	Mouse
Specificity	This product detects Tripeptidyl-peptidase 1 (TPP1). It is unable to detect Adrenocortical dysplasia protein homolog which is also known as TPP1.
Tested applications	**Suitable for:** WB, IHC-P, Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment within Human TPP1 aa 195-305. The exact sequence is proprietary. Database link: **O14773**
Positive control	IHC-P: Human salivary gland tissue. WB: A431 cell lysate. Flow Cyt: JEG3 cells.
General notes	This product was changed from ascites to tissue culture supernatant on 24/1/19. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.
	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.4
Purity	Tissue culture supernatant
Purification notes	Purified from TCS.
Clonality	Monoclonal

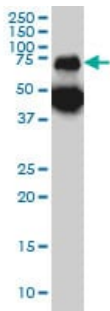| Clone number	3B1
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab54685 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
WB	★★★★★ (1)	Use at an assay dependent concentration. Predicted molecular weight: 61 kDa.
IHC-P		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

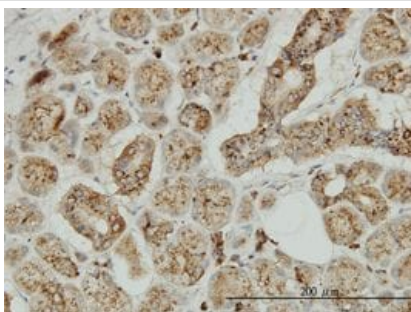| **Function**	Lysosomal serine protease with tripeptidyl-peptidase I activity. May act as a non-specific lysosomal peptidase which generates tripeptides from the breakdown products produced by lysosomal proteinases. Requires substrates with an unsubstituted N-terminus.
Tissue specificity	Detected in all tissues examined with highest levels in heart and placenta and relatively similar levels in other tissues.
Involvement in disease	Defects in TPP1 are the cause of neuronal ceroid lipofuscinosis type 2 (CLN2) [MIM:204500]. A form of neuronal ceroid lipofuscinosis. Neuronal ceroid lipofuscinoses are progressive neurodegenerative, lysosomal storage diseases characterized by intracellular accumulation of autofluorescent liposomal material, and clinically by seizures, dementia, visual loss, and/or cerebral atrophy. The lipopigment pattern seen most often in CLN2 consists of curvilinear profiles.
Sequence similarities	Belongs to the peptidase S53 family.
Post-translational modifications	Activated by autocatalytic proteolytical processing upon acidification. N-glycosylation is required for processing and activity.
Cellular localization	Lysosome. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images

TPP1 antibody (ab54685) at 1ug/lane + A-431 cell lysate at 25ug/lane.

This image was generated using the ascites version of the product.

Western blot - Anti-TPP1 antibody [3B1] (ab54685)

TPP1 antibody (ab54685) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human salivary gland.
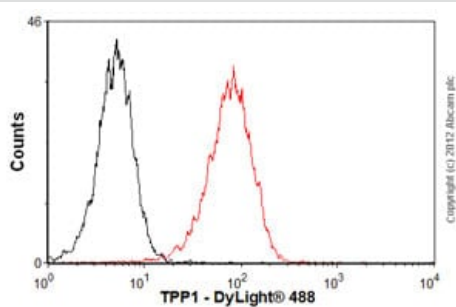
This image was generated using the ascites version of the product.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TPP1 antibody [3B1] (ab54685)

Overlay histogram showing JEG3 cells stained with ab54685 (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. The cells were then incubated with the antibody (ab54685, 2µg/1x10^6 cells) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.
This image was generated using the ascites version of the product.

Flow Cytometry - Anti-TPP1 antibody [3B1] (ab54685)

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