

Product datasheet

Anti-Thrombospondin 1 antibody [A6.1] ab1823

★★★★★ [19 Abreviews](#) [69 References](#) [5 Images](#)

Overview

Product name	Anti-Thrombospondin 1 antibody [A6.1]
Description	Mouse monoclonal [A6.1] to Thrombospondin 1
Host species	Mouse
Tested applications	Suitable for: Flow Cyt, ICC/IF, IHC-P
Species reactivity	Reacts with: Rat, Human
Immunogen	Full length protein corresponding to Human Thrombospondin 1. BALB/C mice were injected with reduced and alkylated purified human TSP (fully denatured) from the supernatant of thrombin-activated platelets.
Positive control	Tonsil
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.3 Preservative: 0.05% Sodium azide Constituent: 1% BSA
Purity	IgG fraction
Clonality	Monoclonal
Clone number	A6.1
Isotype	IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab1823 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		Use 1-2µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (4)	Use at an assay dependent concentration.
IHC-P	★★★★★ (7)	Use at an assay dependent concentration.

Target

Function

Adhesive glycoprotein that mediates cell-to-cell and cell-to-matrix interactions. Binds heparin. May play a role in dentinogenesis and/or maintenance of dentin and dental pulp (By similarity). Ligand for CD36 mediating antiangiogenic properties. Plays a role in ER stress response, via its interaction with the activating transcription factor 6 alpha (ATF6) which produces adaptive ER stress response factors.

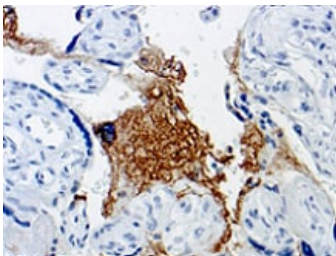
Sequence similarities

Belongs to the thrombospondin family.
Contains 2 EGF-like domains.
Contains 1 laminin G-like domain.
Contains 1 TSP C-terminal (TSPC) domain.
Contains 3 TSP type-1 domains.
Contains 8 TSP type-3 repeats.
Contains 1 VWFC domain.

Cellular localization

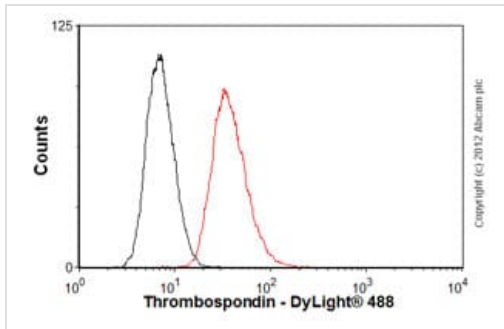
Endoplasmic reticulum. Sarcoplasmic reticulum.

Images



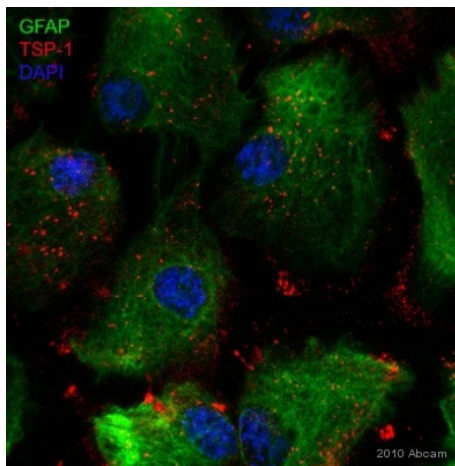
Immunohistochemical analysis of formalin-fixed paraffin-embedded human placenta, labeling Thrombospondin with ab1823.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombospondin 1 antibody [A6.1] (ab1823)



Flow Cytometry - Anti-Thrombospondin 1 antibody
[A6.1] (ab1823)

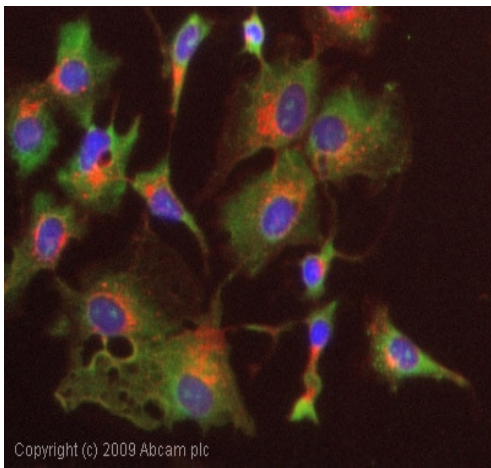
Overlay histogram showing PC12 cells stained with ab1823 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab1823, 2µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in PC12 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Anti-Thrombospondin 1 antibody [A6.1] (ab1823)

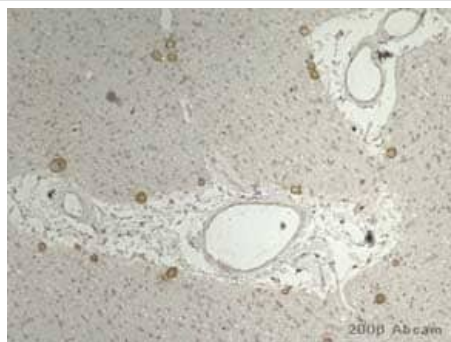
This image is courtesy of an anonymous Abreview

ab1823 staining Thrombospondin in a primary culture of rat astrocytes by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.3% Triton and blocked with 3% BSA for 15 minutes at 20°C. Samples were incubated with primary antibody (1/50: 3% BSA; PBS) for 30 minutes at 20°C. A Cy3®-conjugated-Donkey polyclonal to mouse IgG (1/500) was used as secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Thrombospondin 1 antibody [A6.1] (ab1823)

ICC/IF image of ab1823 stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab1823, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombospondin 1 antibody [A6.1] (ab1823)

ab1823 at a 1/25 dilution staining human Glioblastoma Multiform tissue sections by Immunohistochemistry (Formalin-fixed paraffin-embedded sections). Following heat mediated antigen retrieval the tissue was stained with the antibody for 1 hour. Bound antibody was detected using biotin anti-mouse probe .

This image is courtesy of an Abreview submitted by **Francisca Wu** on **14 March 2006**.

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