

## Product datasheet

### Anti-ITM2B antibody [OT1C11] ab119044

[4 Images](#)

#### Overview

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<b>Product name</b>	Anti-ITM2B antibody [OT1C11]
<b>Description</b>	Mouse monoclonal [OT1C11] to ITM2B
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length Human ITM2B produced in HEK293T cells (NP_068839).
<b>Positive control</b>	WB: HEK293T cell lysate transfected with pCMV6-ENTRY ITM2B cDNA IHC: Human kidney tissue Flow Cyt (Intra): HeLa and Jurkat cells.
<b>General notes</b>	Dilute in PBS (pH7.3) before use.  The clone number has been updated from 1C11 to OT1C11, both clone numbers name the same clone.

This product was changed from ascites to tissue culture supernatant on 5<sup>th</sup> September 2018. 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

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.30 Preservative: 0.02% Sodium azide

	Constituents: 1% BSA, 50% Glycerol, PBS
<b>Purity</b>	Tissue culture supernatant
<b>Purification notes</b>	Purified from TCS.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	OT11C11
<b>Isotype</b>	IgG2a

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab119044 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)		1/100. <b>ab170191</b> - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
WB		1/2000. Predicted molecular weight: 30 kDa.
IHC-P		1/150.

## Target

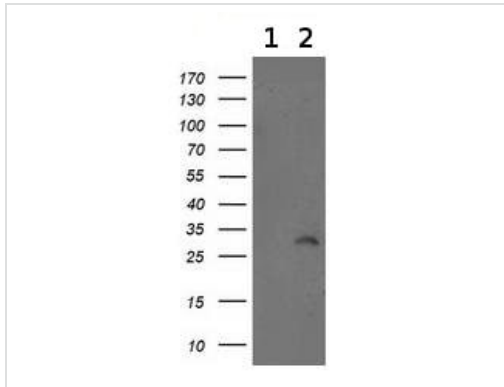
<b>Function</b>	Functions as a protease inhibitor. Plays a role in APP processing regulating the physiological production of the beta amyloid peptide. Restricts docking of gamma-secretase to APP and access of alpha- and beta-secretase to their cleavage APP sequence.
<b>Tissue specificity</b>	Expressed in brain and in other tissues.
<b>Involvement in disease</b>	Defects in ITM2B are a cause of cerebral amyloid angiopathy ITM2B-related type 1 (CAA-ITM2B1) [MIM:176500]. A disorder characterized by amyloid deposition in the walls of cerebral blood vessels and neurodegeneration in the central nervous system. Cerebral amyloid angiopathy, non-neuritic and perivascular plaques and neurofibrillary tangles are the predominant pathological lesions. Clinical features include progressive mental deterioration, spasticity and muscular rigidity. Defects in ITM2B are a cause of cerebral amyloid angiopathy ITM2B-related type 2 (CAA-ITM2B2) [MIM:117300]; also known as hereditary ophthalmic-oto-encephalopathy. A disorder characterized by amyloid deposition in the walls of the blood vessels of the cerebrum, choroid plexus, cerebellum, spinal cord and retina. Plaques and neurofibrillary tangles are observed in the hippocampus. Clinical features include progressive ataxia, dementia, cataracts and deafness.
<b>Sequence similarities</b>	Belongs to the ITM2 family. Contains 1 BRICHOS domain.
<b>Post-translational modifications</b>	The C-terminal part of the ectodomain is processed by furin and related proteases producing a secreted peptide of 4 to 5 kDa. For the ABRI and ADAN variants the C-terminal secreted peptide is larger and may produce amyloid fibrils responsible for neuronal dysfunction and dementia. The remaining part of the ectodomain containing the BRICHOS domain is cleaved by ADAM10 and is secreted as a peptide of 25 kDa. The membrane-bound N-terminal fragment (NTF) of 22 kDa is

further proteolytically processed by SPPL2A and SPPL2B through regulated intramembrane proteolysis producing a secreted peptide (BRI2C) and an intracellular domain (ICD) released in the cytosol.

### Cellular localization

Golgi apparatus membrane. Cell membrane.

### Images



Western blot - Anti-ITM2B antibody [OT11C11] (ab119044)

**All lanes** : Anti-ITM2B antibody [OT11C11] (ab119044) at 1/2000 dilution

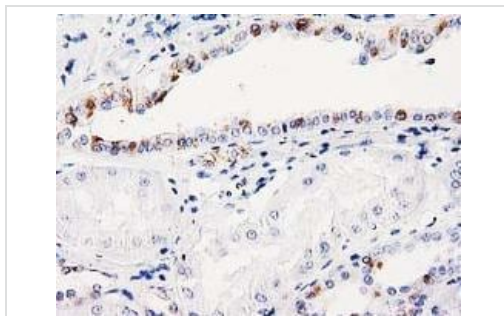
**Lane 1** : HEK293T lysate transfected with pCMV6-ENTRY control cDNA

**Lane 2** : HEK293T lysate transfected with pCMV6-ENTRY ITM2B cDNA

Lysates/proteins at 5 µg per lane.

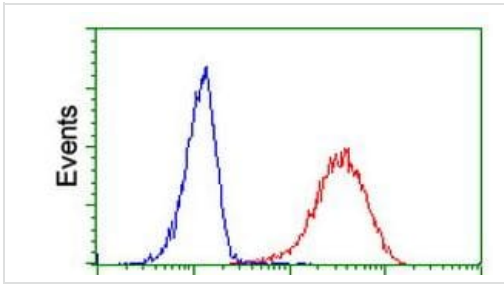
**Predicted band size:** 30 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC202377)



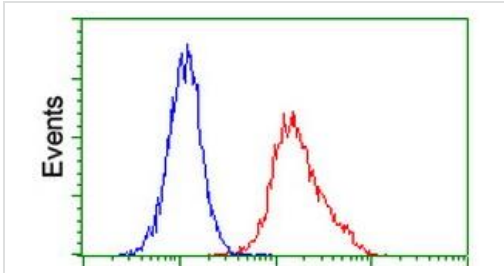
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ITM2B antibody [OT11C11] (ab119044)

ab119044, at 1/150 dilution, staining ITM2B in paraffin embedded Human kidney by Immunohistochemistry.



Flow Cytometry (Intracellular) - Anti-ITM2B antibody [OT1C11] (ab119044)

ab119044 at 1/100 dilution staining ITM2B in HeLa cells by Flow cytometry (Intracellular) (Red) compared to a nonspecific negative control antibody (Blue).



Flow Cytometry (Intracellular) - Anti-ITM2B antibody [OT1C11] (ab119044)

ab119044 at 1/100 dilution staining ITM2B in Jurkat cells by Flow cytometry (Intracellular) (Red) compared to a nonspecific negative control antibody (Blue).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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