# abcam

## Product datasheet

# Anti-ZAP70 antibody [SPM362] ab233985

★★★★★ 2 Abreviews 1 Image

Overview

Product name Anti-ZAP70 antibody [SPM362]

**Description** Mouse monoclonal [SPM362] to ZAP70

Host species Mouse

**Tested applications** Suitable for: ℍC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse

Immunogen Recombinant fragment corresponding to Human ZAP70 aa 1-300. Encompassing SH2 domains

of human ZAP70.

Database link: P43403

Run BLAST with
Run BLAST with

Positive control IHC-P: Human tonsil tissue.

**General notes**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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA

Purity Protein A/G purified

**Purification notes** Purified from Bioreactor Concentrate by Protein A/G.

**Clonality** Monoclonal

1

Clone numberSPM362IsotypeIgG2aLight chain typekappa

#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab233985 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
IHC-P		Use a concentration of 0.5 - 1 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Incubate with primary antibody for 30 minutes at room temperature.

<b>Target</b>	Ĺ
---------------	---

Function Plays a role in T-cell development and lymphocyte activation. Essential for TCR-mediated IL-2

production. Isoform 1 induces TCR-mediated signal transduction, isoform 2 does not.

**Tissue specificity** Expressed in T- and natural killer cells.

Involvement in disease Defects in ZAP70 are the cause of selective T-cell defect (STD) [MIM:176947]. STD is an

autosomal recessive form of severe combined immunodeficiency characterized by a selective

absence of CD8-type T-cells.

**Sequence similarities** Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily.

Contains 1 protein kinase domain.

Contains 2 SH2 domains.

**Domain** The SH2 domains bind to the phosphorylated tyrosine-based activation motif (TAM) of CD3Z and

the non-canonical phosphorylated tyrosine-based activation motif (TAM) of RHOH.

Post-translational

modifications

\_\_\_\_\_

Phosphorylated on tyrosine residues upon T-cell antigen receptor (TCR) stimulation. Tyr-319

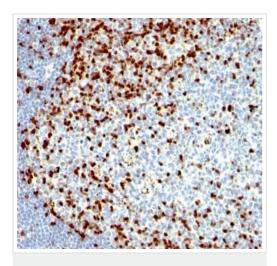
phosphorylation is essential for full activity.

**Cellular localization**Cytoplasm. Cell membrane. After antigen stimulation, isoform 1 concentrates at the

immunological synapse and isoform 2 remains cytoplasmic. Co-localizes together with RHOH in the immunological synapse. RHOH is required for its proper localization to the cell membrane and

cytoskeleton fractions in the thymocytes.

# **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ZAP70 antibody
[SPM362] (ab233985)

Formalin-fixed, paraffin-embedded human tonsil tissue stained for ZAP70 using ab233985 at 1  $\mu$ g/ml in immunohistochemical analysis.

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 <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors