abcam

Product datasheet

Anti-ZAP70 antibody [ZAP-03] ab38871

★★★★★ 1 Abreviews 画像数 6

製品の概要

製品名 Anti-ZAP70 antibody [ZAP-03]

製品の詳細 Mouse monoclonal [ZAP-03] to ZAP70

由来種 Mouse

特異性 ab38871 recognises ZAP-70, a 70 kDa protein tyrosine kinase expressed in T and NK cells.

アプリケーション 適用あり: Flow Cyt (Intra), WB

種交差性 交差種: Human

免疫原 Recombinant fragment representing C-terminal part (160 amino acids) of human ZAP-70.

ポジティブ・コントロール WB: HPB-ALL human peripheral blood leukemia T-cell line. Flow Cyt (Intra): Human B-CLL

peripheral blood.

特記事項 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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term.

バッファー pH: 7.40

Preservative: 0.097% Sodium azide

Constituent: PBS

精製度 Protein A purified

特記事項(精製) Purified from hybridoma culture supernatant. Purity >95% by SDS-PAGE.

ポリ/モノ モノクローナル

クローン名 ZAP-03

アイソタイプ lgG1

1

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab38871の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use a concentration of 2 - 5 µg/ml. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
WB	★★★★☆ (1)	Use a concentration of 0.5 µg/ml. Detects a band of approximately 70 kDa (predicted molecular weight: 70 kDa).

ターゲット情報

機能 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.

組織特異性 Expressed in T- and natural killer cells.

関連疾患 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.

配列類似性 Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily.

Contains 1 protein kinase domain.

Contains 2 SH2 domains.

ドメイン 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.

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

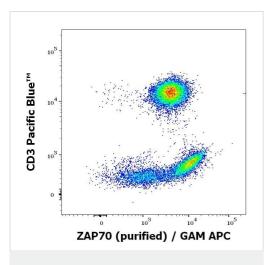
phosphorylation is essential for full activity.

細胞内局在 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.

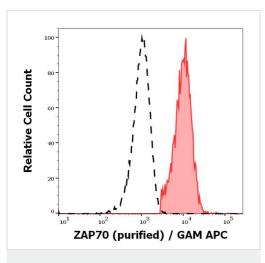
画像



whole blood stained using ab38871 (concentration in sample 9 μg/ml, GAM APC) and anti-human CD3 (UCHT1) Pacific Blue™ antibody (20 μl reagent / 100 μl of peripheral whole blood).

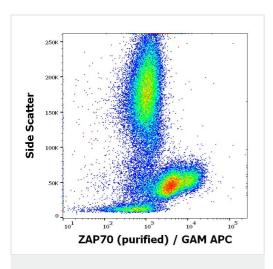
Flow cytometry multicolor intracellular staining of human peripheral

Flow Cytometry (Intracellular) - Anti-ZAP70 antibody [ZAP-03] (ab38871)



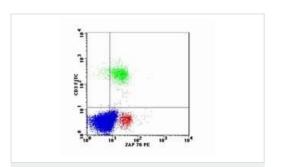
Flow Cytometry (Intracellular) - Anti-ZAP70 antibody [ZAP-03] (ab38871)

Separation of human CD3 negative ZAP70 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (intracellular staining) of peripheral whole blood stained using ab38871 (concentration in sample 9 μ g/ml, GAM APC).



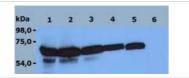
Flow cytometry intracellular staining pattern of human peripheral whole blood using ab38871 (concentration in sample 9 μ g/ml, GAM APC).

Flow Cytometry (Intracellular) - Anti-ZAP70 antibody [ZAP-03] (ab38871)



Flow Cytometry (Intracellular) - Anti-ZAP70 antibody [ZAP-03] (ab38871)

Intracellular Flow Cytometry analysis of the human peripheral blood of a patient with B-cell chronic lymphatic leukemia (B-CLL) using antibody ab38871; Dot Plot diagram shows the distribution of lymphocyte populations: T-lymphocytes (green), B-lymphocytes (blue) and NK cells (red).



Western blot - Anti-ZAP70 antibody [ZAP-03] (ab38871)

Lane 1 : Anti-ZAP70 antibody [ZAP-03] (ab38871) at 4 μ g/ml

Lane 2 : Anti-ZAP70 antibody [ZAP-03] (ab38871) at 2 $\mu g/ml$

Lane 3 : Anti-ZAP70 antibody [ZAP-03] (ab38871) at 1 $\mu g/ml$

Lane 4: Anti-ZAP70 antibody [ZAP-03] (ab38871) at 0.5 μg/ml

Lane 5: ZAP-70 specific antibody 1E7.2 at 1 µg/ml

Lane 6: Isotypic control PPV-06 (mouse IgG1).

All lanes: HPB-ALL peripheral blood leukemia T-cell line

Performed under reducing conditions.

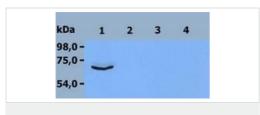
Predicted band size: 70 kDa

Observed band size: 70 kDa

Additional bands at: 55 kDa (possible lgG), 55 kDa (possible

degradation product)

Western Blotting analysis of HPB-ALL peripheral blood leukemia T-cell line; SDS-PAGE; 10% separating gel, 4% stacking gel; Reducing conditions. ZAP-70 is a molecule susceptible to degradation. It is recommended to use freshly prepared cell lysates (protease inhibitors are essential) to avoid non-specific staining of degradation products. Western Blotting analysis of HPB-ALL peripheral blood leukemia T-cell line; SDS-PAGE; 10% separating gel, 4% stacking gel. ZAP-70 is a molecule susceptible to degradation. It is recommended to use freshly prepared cell lysates (protease inhibitors are essential) to avoid non-specific staining of degradation products.



Western blot - Anti-ZAP70 antibody [ZAP-03] (ab38871)

Lanes 1-2 : Anti-ZAP70 antibody [ZAP-03] (ab38871) at 0.5 μ g/ml

Lanes 3-4: Isotypic control PPV-06 (mouse IgG1)

Lanes 1 & 3 : HPB-ALL cell line
Lanes 2 & 4 : RAMOS cell line

Performed under reducing conditions.

Predicted band size: 70 kDa **Observed band size:** 70 kDa

Western Blotting analysis of HPB-ALL peripheral blood leukemia T-cell line and RAMOS human Burkitt lymphoma cell line; SDS-PAGE; 10% separating gel, 4% stacking gel.

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.co.jp/abpromise or contact our technical team.

Terms and conditions

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