abcam

Product datasheet

Anti-IL-6 antibody [EPR21711] - Low endotoxin, Azide free ab246703



リコンピナント

RabMAb

画像数 5

製品の概要

製品名 Anti-IL-6 antibody [EPR21711] - Low endotoxin, Azide free

製品の詳細 Rabbit monoclonal [EPR21711] to IL-6 - Low endotoxin, Azide free

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IP, ICC/IF

種交差性 交差種: Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: LPS/BFA-treated HUVEC whole cell lysate; Wild-type A549 IL-1b (ab259387)-treated (20

ng/ml, 24h) and Brefeldin A (5 ug/ml for the last 4h) cell lysate. ICC/IF: LPS/BFA-treated HUVEC cells. Flow Cyt (intra): LPS/BFA-treated HUVEC cells. IP: LPS/BFA-treated HUVEC whole cell

lysate.

特記事項 ab246703 is the carrier-free version of ab233706.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

1

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Our <u>Low endotoxin, azide-free formats</u> have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

特記事項(精製) Endotoxin level is less than 1 EU/ml as determined by the TAL test.

ポリたノ モノクローナル **ウローン名** EPR21711

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab246703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 at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 21 kDa (predicted molecular weight: 23 kDa).
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

ターゲット情報

機能 Cytokine with a wide variety of biological functions. It is a potent inducer of the acute phase

response. Plays an essential role in the final differentiation of B-cells into Ig-secreting cells Involved in lymphocyte and monocyte differentiation. It induces myeloma and plasmacytoma growth and induces nerve cells differentiation Acts on B-cells, T-cells, hepatocytes, hematopoeitic progenitor cells and cells of the CNS. Also acts as a myokine. It is discharged into the

progetition cells and cells of the CN3. Also acts as a myokine, it is discharged into the

bloodstream after muscle contraction and acts to increase the breakdown of fats and to improve

insulin resistance.

関連疾患 Genetic variations in IL6 are associated with susceptibility to rheumatoid arthritis systemic

juvenile (RASJ) [MIM:604302]. An inflammatory articular disorder with systemic-onset beginning before the age of 16. It represents a subgroup of juvenile arthritis associated with severe extraarticular features and occasionally fatal complications. During active phases of the disorder, patients display a typical daily spiking fever, an evanescent macular rash, lymphadenopathy, hepatosplenomegaly, serositis, myalgia and arthritis.

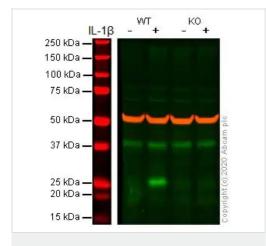
Note=A IL6 promoter polymorphism is associated with a lifetime risk of development of Kaposi sarcoma in HIV-infected men.

配列類似性 Belongs to the IL-6 superfamily.

翻訳後修飾 N- and O-glycosylated.

細胞内局在 Secreted.

画像



Western blot - Anti-IL-6 antibody [EPR21711] - Low endotoxin, Azide free (ab246703)

All lanes : Anti-IL-6 antibody [EPR21711] (<u>ab233706</u>) at 1/1000 dilution

Lane 1: Wild-type A549 Brefeldin A (<u>ab120299</u>)-treated (5ug/ml, 4h) cell lysate

Lane 2: Wild-type A549 IL-1ß (<u>ab259387</u>) (20 ng/ml, 24h) and Brefeldin A (<u>ab120299</u>)-treated (5 ug/ml for the last 4h) cell lysate Lane 3: IL-6 knockout A549 Brefeldin A (<u>ab120299</u>)-treated

(5ug/ml, 4h) cell lysate

 $\textbf{Lane 4: } \textbf{L-6} \text{ knockout A549 } \textbf{L-1} \textbf{(} \underline{\textbf{ab259387}} \textbf{) (20 ng/ml, 24h) and } \\ \textbf{Brefeldin A (} \underline{\textbf{ab120299}} \textbf{)-treated (5 ug/ml for the last 4h) cell lysate }$

Lysates/proteins at 30 µg per lane.

Performed under reducing conditions.

Predicted band size: 23 kDa **Observed band size:** 25 kDa

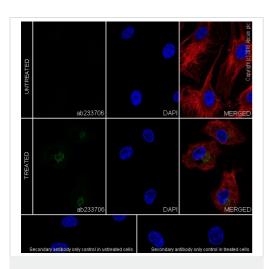
Additional bands at: 40 kDa (possible non-specific binding)

This data was developed using the same antibody clone in a different buffer formulation (<u>ab233706</u>).

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab233706</u> observed at 25 kDa. Red - loading control <u>ab7291</u> (Mouse anti-Alpha Tubulin [DM1A] observed at 55kDa.

<u>ab233706</u> was shown to react with IL-6 in wild-type A549 cells in western blot with loss of signal observed in IL-6 knockout cell line <u>ab273751</u> (knockout cell lysate <u>ab275501</u>). Wild-type and IL-6 knockout A549 cell lysates were subjected to SDS-PAGE.

Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with <u>ab233706</u> and <u>ab7291</u> (Mouse anti-Alpha Tubulin [DM1A] overnight at 4°C at a 1 in 1000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

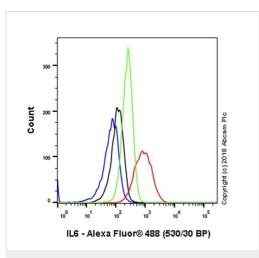


Immunocytochemistry/ Immunofluorescence - Anti-IL-6 antibody [EPR21711] - Low endotoxin, Azide free (ab246703)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HUVEC (human umbilical vein endothelial cell line) cells labeling IL6 with <u>ab233706</u> at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (<u>ab150077</u>) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining in HUVEC cells treated with lipopolysaccharide (0.5 µg/ml) for 24h and Brefeldin A (300 ng/ml) for 20h. The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) (<u>ab195889</u>) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution.

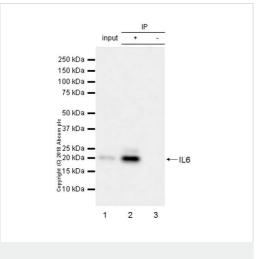
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol and sodium azide (ab233706).



Flow Cytometry (Intracellular) - Anti-IL-6 antibody [EPR21711] - Low endotoxin, Azide free (ab246703)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HUVEC (human umbilical vein endothelial cell line) treated with lipopolysaccharide (0.5 µg/ml) for 24h and Brefeldin A (300 ng/ml) for 20h (red) / untreated control (green) cells labeling IL6 with ab233706 at 1/500 compared with a Rabbit monoclonal IgG (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti rabbit IgG (Alexa Fluor 488, ab150077), at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol and sodium azide (ab233706).



Immunoprecipitation - Anti-IL-6 antibody [EPR21711]

- Low endotoxin, Azide free (ab246703)

IL6 was immunoprecipitated from 0.35 mg HUVEC (human umbilical vein endothelial cell line) treated with lipopolysaccharide (0.5 μg/ml) for 24h and Brefeldin A (300 ng/ml) for 20h, whole cell lysate with <u>ab233706</u> at 1/30 dilution. Western blot was performed from the immunoprecipitate using <u>ab233706</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

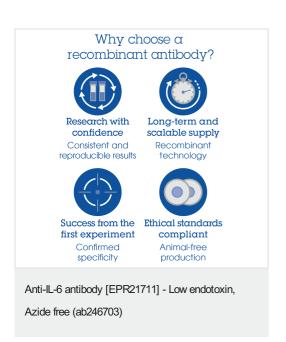
Lane 1: HUVEC treated with lipopolysaccharide (0.5 μ g/ml) for 24h and Brefeldin A (300 ng/ml) for 20h, whole cell lysate 10 μ g (Input). **Lane 2:** <u>ab233706</u> IP in HUVEC treated with lipopolysaccharide (0.5 μ g/ml) for 24h and Brefeldin A (300 ng/ml) for 20h, whole cell lysate.

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab233706</u> in HUVEC treated with lipopolysaccharide (0.5 μ g/ml) for 24h and Brefeldin A (300 ng/ml) for 20h, whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 5 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol and sodium azide (<u>ab233706</u>).



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