abcam

Product datasheet

Anti-IP10 antibody [EPR20764] - BSA and Azide free ab224678

KO VALIDATED Recombinant RabMAb

5 Images

Overview

Product name	Anti-IP10 antibody [EPR20764] - BSA and Azide free
Description	Rabbit monoclonal [EPR20764] to IP10 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** Indirect ELISA, WB
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild-type THP-1 treated IFNg (100 ng/ml, 32 h), TNF-alpha (10 ng/ml, 32 h), Brefeldin A (5 ug/ml, 6 h), Wild-type A549 IFN-y (**ab259377**) (100 ng/ml, 32 h) and TNF-alpha (**ab259410**) (10 ng/ml, 32h), and Brefeldin A (**ab120299**)-treated (5ug/ml for the last 6h) cell lysate; THP-1 IFN-y (**ab259377**) (200ng/ml, 24h) and LPS (50ng/ml, 24h)-treated for 24 hours, and Brefeldin A (**ab120299**)-treated (5ug/ml for the last 6h) cell lysate.
General notes	ab224678 is the carrier-free version of **ab214668**. Our **carrier-free** 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 **conjugation kits** 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 monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20764
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab224678 in the following tested applications.

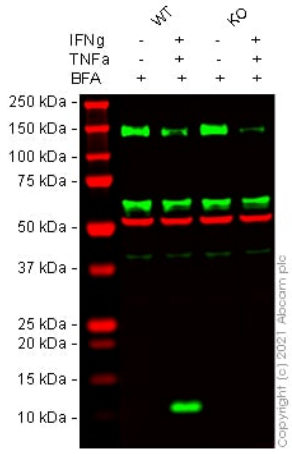
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Indirect ELISA		Use at an assay dependent concentration.
WB		1/1000. Detects a band of approximately 12 kDa (predicted molecular weight: 10 kDa).

Target

Function	Chemotactic for monocytes and T-lymphocytes. Binds to CXCR3.
Sequence similarities	Belongs to the intercrine alpha (chemokine CxC) family.
Post-translational modifications	CXCL10(1-73) is produced by proteolytic cleavage after secretion from keratinocytes.
Cellular localization	Secreted.

Images



Western blot - Anti-IP10 antibody [EPR20764] - BSA and Azide free (ab224678)

All lanes : Anti-IP10 antibody [EPR20764] (**ab214668**) at 1/1000 dilution

Lane 1 : Wild-type THP-1 vehicle control IFNg (0 ng/ml, 32 h), TNF-alpha (0 ng/ml, 32 h), Brefeldin A (5 ug/ml, 6 h) cell lysate
Lane 2 : Wild-type THP-1 treated IFNg (100 ng/ml, 32 h), TNF-alpha (10 ng/ml, 32 h), Brefeldin A (5 ug/ml, 6 h) cell lysate
Lane 3 : CXCL10 knockout THP-1 vehicle control IFNg (0 ng/ml, 32 h), TNF-alpha (0 ng/ml, 32 h), Brefeldin A (5 ug/ml, 6 h) cell lysate
Lane 4 : CXCL10 knockout THP-1 treated IFN-gamma (100 ng/ml, 32 h), TNF-alpha (10 ng/ml, 32 h), Brefeldin A (5 ug/ml, 6 h) cell lysate

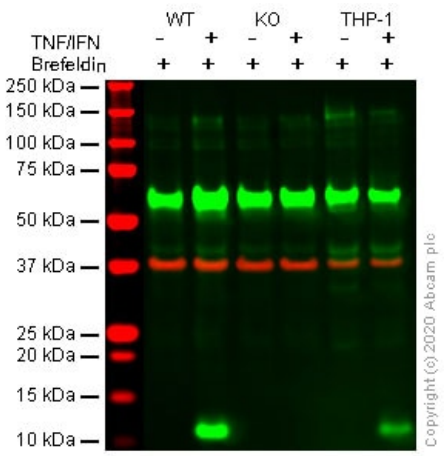
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 10 kDa
Observed band size: 11 kDa

False colour image of Western blot: Anti-IP10 antibody [EPR20764] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (**ab7291**) loading control staining at 1/20000 dilution, shown in red. In Western blot, **ab214668** was shown to bind specifically to IP10. A band was observed at 11 kDa in treated wild-type THP-1 cell lysates with no signal observed at this size in treated CXCL10 knockout cell line **ab277860** (knockout cell lysate **ab282997**). To generate this image, wild-type and CXCL10 knockout THP-1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD)

preabsorbed (**ab216776**) at 1/20000 dilution.



Western blot - Anti-IP10 antibody [EPR20764] - BSA and Azide free (ab224678)

All lanes : Anti-IP10 antibody [EPR20764] (**ab214668**) at 1/1000 dilution

Lane 1 : Wild-type A549 Brefeldin A (**ab120299**)-treated (5ug/ml, 6h) cell lysate
Lane 2 : Wild-type A549 IFN-y (**ab259377**) (100 ng/ml, 32 h) and TNF-alpha (**ab259410**) (10 ng/ml, 32h), and Brefeldin A (**ab120299**)-treated (5ug/ml for the last 6h) cell lysate
Lane 3 : IP10 knockout A549 Brefeldin A (**ab120299**)-treated (5ug/ml, 6h) cell lysate
Lane 4 : IP10 knockout A549 IFN-y (**ab259377**) (100ng/ml, 32h) and TNF-alpha (**ab259410**) (10ng/ml, 32h), and Brefeldin A (**ab120299**)-treated (5ug/ml for the last 6h) cell lysate
Lane 5 : THP-1 Brefeldin A (**ab120299**)-treated (5ug/ml, 6h) cell lysate
Lane 6 : THP-1 IFN-y (**ab259377**) (200ng/ml, 24h) and LPS (50ng/ml, 24h)-treated for 24 hours, and Brefeldin A (**ab120299**)-treated (5ug/ml for the last 6h) cell lysate

Lysates/proteins at 30 µg per lane.

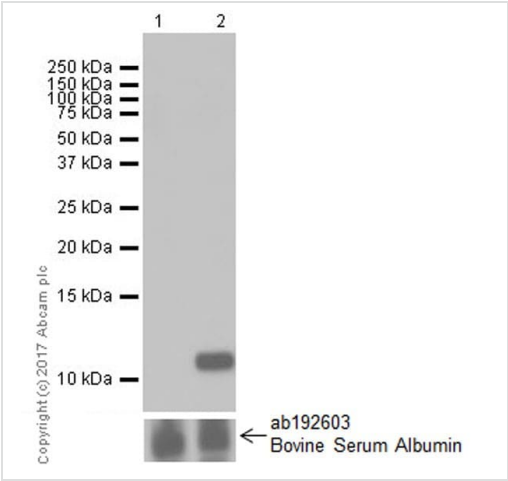
Performed under reducing conditions.

Predicted band size: 10 kDa
Observed band size: 11 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab214668**).

ab214668 was shown to react with IP10 in wild-type A549 cells in western blot with loss of signal observed in IP10 knockout cell line **ab266971** (knockout cell lysate **ab256888**). Wild-type and IP10 knockout A549 cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with **ab214668** and **ab8245** (Mouse anti-GAPDH antibody [6C5]) 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 (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (**ab216772**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before

imaging.



Western blot - Anti-IP10 antibody [EPR20764] - BSA and Azide free (ab224678)

All lanes : Anti-IP10 antibody [EPR20764] (**ab214668**) at 1/1000 dilution

Lane 1 : Untreated THP-1 (human monocytic leukemia cell line) culture supernatant
Lane 2 : THP-1 treated with 200 ng/ml interferon-gamma (IFN-gamma, **ab9659**) and 50 ng/ml lipopolysaccharides (LPS) for 24 hours, culture supernatant

Lysates/proteins at 15 µl per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Developed using the ECL technique.

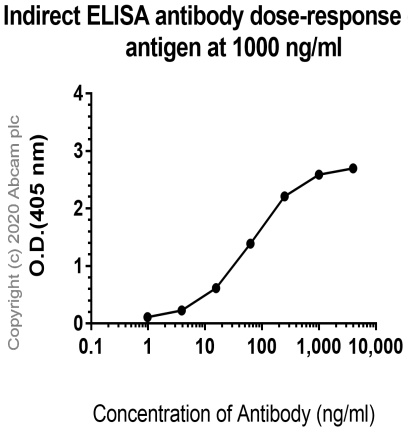
Predicted band size: 10 kDa
Observed band size: 12 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

IP10 protein secretion can be induced by IFN-gamma treatment (PMID: 11907072).

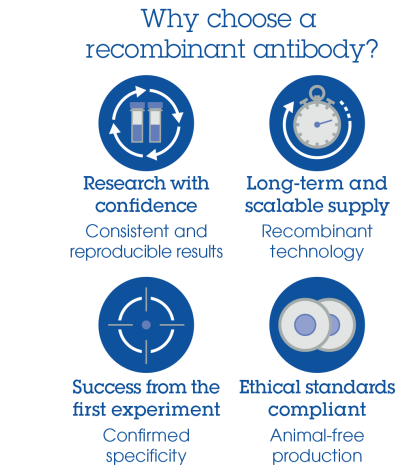
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab214668**).



ELISA - Anti-IP10 antibody [EPR20764] - BSA and Azide free (ab224678)

This data was developed using **ab214668**, the same antibody clone in a different buffer formulation.

ELISA analysis of CXCL10 recombinant protein at 1000 ng/mL with **ab214668**. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.



Anti-IP10 antibody [EPR20764] - BSA and Azide free (ab224678)

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