# abcam

#### Product datasheet

## Anti-STAT6 antibody [E265] ab32108



Recombinant RabMAb

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#### Overview

**Product name** Anti-STAT6 antibody [E265]

Rabbit monoclonal [E265] to STAT6 **Description** 

**Host species** Rabbit

**Specificity** ab32108 recognises Stat-6. It does not cross react with other STAT family members

**Tested applications** Suitable for: WB, IP, Flow Cyt (Intra), ICC/IF

Unsuitable for: IHC

Reacts with: Human Species reactivity

**Immunogen** Synthetic peptide within Human STAT6 aa 800-900 (C terminal). The exact sequence is

proprietary.

Positive control WB: HeLa and Raji cells. ICC/IF: Raji cells. Flow Cyt (intra): HeLa cells IP: HeLa cell lysates

**General notes** 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 7.20 Storage buffer

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

**Purity** Protein A purified

**Clonality** Monoclonal

Clone number E265

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab32108 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
WB		1/5000. Detects a band of approximately 100 kDa (predicted molecular weight: 94 kDa).
IP		1/50.
Flow Cyt (Intra)		1/100.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/250 - 1/500.

**Application notes** Is unsuitable for IHC.

**Target** 

**Function** Carries out a dual function: signal transduction and activation of transcription. Involved in

interleukin-4 signalling.

**Sequence similarities**Belongs to the transcription factor STAT family.

Contains 1 SH2 domain.

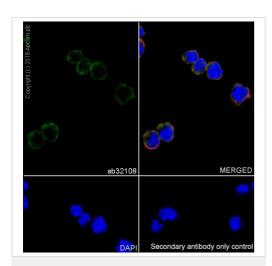
Post-translational modifications

Tyrosine phosphorylated following stimulation by IL-4 and IL-3.

Cellular localization

Cytoplasm. Nucleus. Translocated into the nucleus in response to phosphorylation.

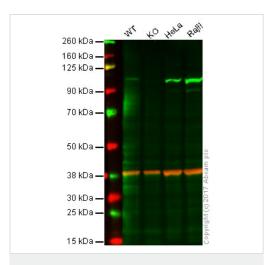
### **Images**



Immunocytochemistry/ Immunofluorescence - Anti-STAT6 antibody [E265] (ab32108)

Confocal image showing cytoplasmic staining in Raji cells.

Immunocytochemistry/immunofluorescence analysis of Raji (human Burkitt's lymphoma B lymphocyte) cells labelling STAT6 with ab32108 at 10 µg/mL. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. <a href="mailto:ab150077">ab150077</a> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) was used as a secondary antibody at 2 µg/mL. Cells were counterstained with <a href="mailto:ab195889">ab195889</a> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (red). Nuclear DNA was labelled with DAPI (blue).



Western blot - Anti-STAT6 antibody [E265] (ab32108)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

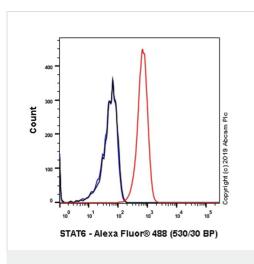
Lane 2: STAT6 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: Raji whole cell lysate (20 µg)

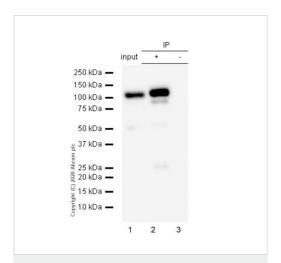
**Lanes 1 - 4:** Merged signal (red and green). Green - ab32108 observed at 94 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab32108 was shown to specifically react with STAT6 in wild-type HAP1 cells as signal was lost in STAT6 knockout cells. Wild-type and STAT6 knockout samples were subjected to SDS-PAGE. Ab32108 and <a href="mailto:ab9484">ab9484</a> (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Flow Cytometry (Intracellular) - Anti-STAT6 antibody [E265] (ab32108)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling STAT6 with purified ab32108 at 1/100 dilution (10  $\mu$ g/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cells without incubation with primary antibody and secondary antibody (Blue).



Immunoprecipitation - Anti-STAT6 antibody [E265] (ab32108)

Purified ab32108 at 1/50 dilution ( $2\mu g$ ) immunoprecipitating STAT6 in HeLa whole cell lysate.

Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

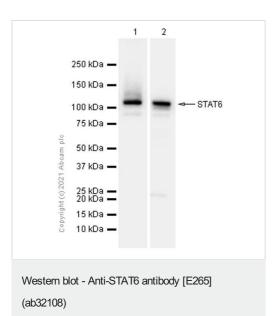
Lane 2 (+): ab32108 + HeLa whole cell lysate.

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab32108 in HeLa whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST. Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 100 kDa



**All lanes :** Anti-STAT6 antibody [E265] (ab32108) at 1/10000 dilution

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

**Lane 2 :** Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lysates/proteins at 15 µg per lane.

#### Secondary

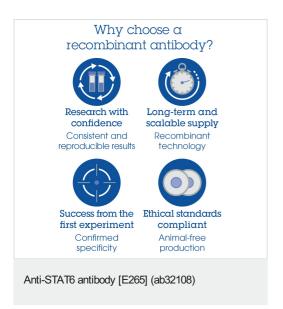
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 94 kDa **Observed band size:** 110,81 kDa

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

Exposure time: Lane 1.7 seconds; Lane 2.3 seconds

This antibody recognizes three isoforms of STAT6, isoform 1 (110kDa), isoform 3 (81kDa), which is consistent with the Uniprot annotation.



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