

Product datasheet

Anti-STAT6 (phospho Y641) antibody [EPR18278-265] ab188080

Recombinant RabMAb

6 Images

Overview

Product name	Anti-STAT6 (phospho Y641) antibody [EPR18278-265]
Description	Rabbit monoclonal [EPR18278-265] to STAT6 (phospho Y641)
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt, IP, ICC/IF, Dot blot
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human STAT6 aa 600-700 (phospho Y641). The exact sequence is proprietary. Database link: P42226
Positive control	WB: Daudi whole cell lysate treated with 100 ng/ml interleukin 4 (IL-4) for 15 minutes. ICC/IF: Daudi cells treated with interleukin 4 (IL-4) (100 ng/ml) for 15minutes. Flow Cyt: Daudi treated with 100 ng/ml IL-4 for 15 minutes. IP: Daudi whole cell lysate treated with 100 ng/ml IL-4 for 15 minutes.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is</p>

Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as 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: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR18278-265
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab188080** 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		1/1000. Detects a band of approximately 110 kDa (predicted molecular weight: 94 kDa).
Flow Cyt		1/400. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		1/30.
ICC/IF		1/100.
Dot blot		1/1000.

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.

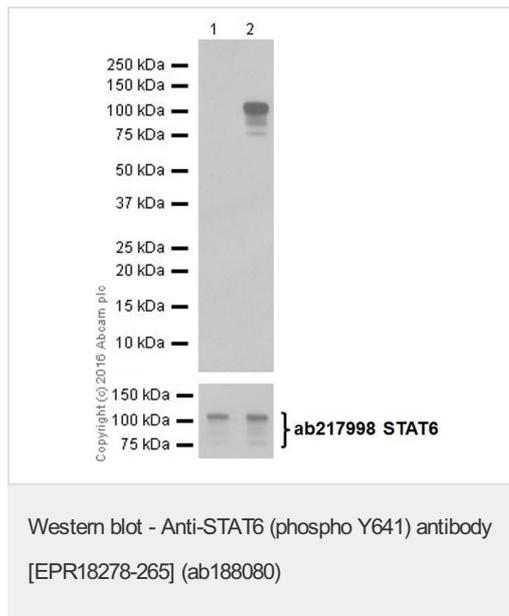
Post-translational modifications

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

Cellular localization

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

Images



All lanes : Anti-STAT6 (phospho Y641) antibody [EPR18278-265] (ab188080) at 1/1000 dilution

Lane 1 : Untreated Daudi (Human Burkitt's lymphoma cell line) whole cell lysate

Lane 2 : Daudi whole cell lysate treated with 100 ng/ml interleukin 4 (IL-4) for 15 minutes

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 94 kDa

Observed band size: 110 kDa

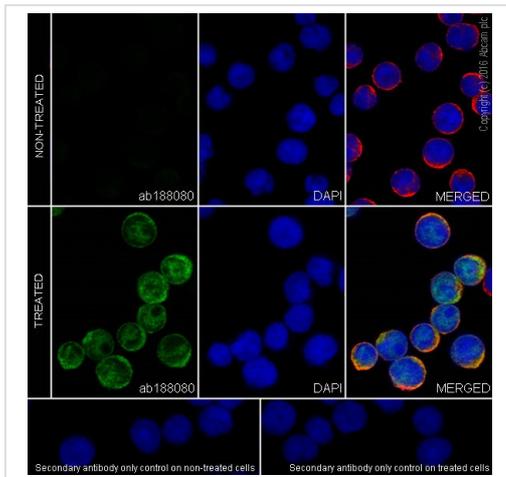
[why is the actual band size different from the predicted?](#)

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFD/MTBST.

Phosphorylation of STAT6 at Y641 can be induced by IL-4 treatment according to the literature (PMID: 21411736, PMID: 15044251, PMID: 14660485).

This antibody recognizes three isoforms of STAT6, isoform 1 (110KD), isoform 2 (75KD), isoform 3 (81KD), which is consistent with the Uniprot annotation.



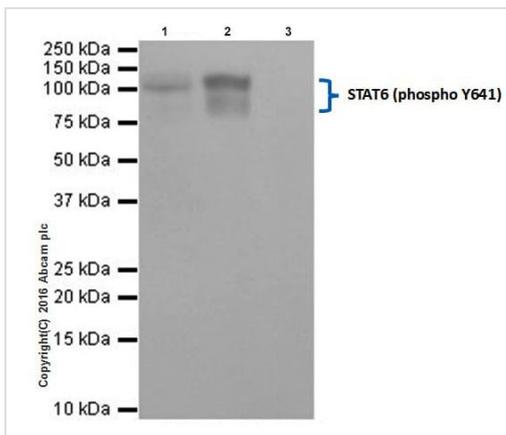
Immunocytochemistry/ Immunofluorescence - Anti-STAT6 (phospho Y641) antibody [EPR18278-265] (ab188080)

Immunofluorescent analysis of 100% methanol-fixed Daudi (Human Burkitt's lymphoma cell line) cells, treated with interleukin 4 (IL-4) (100 ng/ml) for 15 minutes, or untreated, labeling STAT6 (phospho Y641) with ab188080 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

The expression increased and there was nuclear translocation of STAT6 after treatment with interleukin 4 (IL-4) (100 ng/ml) for 15 minutes (PMID:22226123).

The nuclear counterstain is DAPI (blue). Tubulin is detected with ab195889 (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



Immunoprecipitation - Anti-STAT6 (phospho Y641) antibody [EPR18278-265] (ab188080)

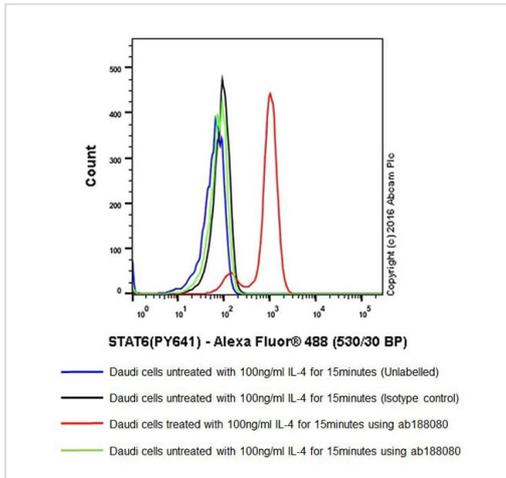
STAT6 (phospho Y641) was immunoprecipitated from 0.35 mg of Daudi (Human Burkitt's lymphoma cell line) whole cell lysate treated with 100 ng/ml IL-4 for 15 minutes with ab188080 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab188080 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: Daudi whole cell lysate treated with 100 ng/ml IL-4 for 15 minutes, 10µg (Input). Lane 2: ab188080 IP in Daudi whole cell lysate treated with 100 ng/ml IL-4 for 15 minutes. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab188080 in Daudi whole cell lysate treated with 100 ng/ml IL-4 for 15 minutes.

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

Exposure time: 1 second.

This antibody recognizes three isoforms of STAT6, isoform 1 (110KD), isoform 2 (75KD), isoform 3 (81KD), which is consistent with the Uniprot annotation.



Flow Cytometry - Anti-STAT6 (phospho Y641) antibody [EPR18278-265] (ab188080)

Flow cytometric analysis of 4% paraformaldehyde-fixed Daudi (Human Burkitt's lymphoma cell line) treated/untreated with 100 ng/ml IL-4 for 15 minutes cells labeling STAT6 (phospho Y641) with ab188080 at 1/400 dilution (treated, red; untreated, green) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Dot Blot - Anti-STAT6 (phospho Y641) antibody [EPR18278-265] (ab188080)

Dot blot analysis of STAT6 (phospho Y641) labeled with ab188080 at 1/1000 dilution.

Lane 1: STAT6 (phospho Y641) phospho peptide.

Lane 2: STAT6 non-phospho peptide.

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 dilution was used as secondary antibody.

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-STAT6 (phospho Y641) antibody [EPR18278-265] (ab188080)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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