

## Datasheet: VPA00008KT

<b>Description:</b>	STAT1 ALPHA ANTIBODY WITH CONTROL LYSATE
<b>Specificity:</b>	STAT1 ALPHA
<b>Other names:</b>	STAT1a
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Polyclonal
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	2 Westerns

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	■			1/1000

**PrecisionAb antibodies have been extensively [validated for the western blot application](#).** The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

### Target Species

Human

### Species Cross Reactivity

Reacts with: Mouse, Rat

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

### Product Form

Purified IgG - liquid

### Preparation

20µl Rabbit polyclonal antibody purified by ion exchange chromatography

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)

**Immunogen** Peptide corresponding to amino acids near the C-terminus of human STAT1 alpha

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**External Database**

**Links**

**UniProt:**

[P42224](#)

[Related reagents](#)

**Entrez Gene:**

[6772](#)

STAT1

[Related reagents](#)

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**Specificity**

**Rabbit anti Human STAT1 alpha antibody** recognizes human signal transducer and activator of transcription 1-alpha also known as transcription factor ISGF-3 components p91/p84. STAT1 alpha is one of two isoforms generated by alternative splicing and encoded for by the STAT1 gene. STAT1 alpha is a ~87 kDa protein belonging to the transcription factor STAT family containing a single [SH2 domain](#). Rabbit anti Human STAT1 alpha antibody recognizes epitopes in a carboxy-terminal region of STAT1 alpha not contained in the short isoform STAT1 beta.

Members of the STAT family respond to cytokines and growth factors and are phosphorylated by receptor associated kinase to form homo- or hetero-dimers. These then translocate to the cell nucleus to act as transcription activators. STAT1 is activated by a number of different ligands including the interferon, gp130 and receptor tyrosine kinase families ([Gerhartz et al. 1996](#)). Mutations in the STAT1 gene lead to a number of immunological disorders including severe combined immunodeficiency phenotypes ([Sharfe et al. 2014](#)), or more selective immunodeficiencies to mycobacteria (usually mycobacteria) bacteria, viruses or fungi depending on the mutation or abnormality involved ([Boisson-Dupuis et al. 2012](#)).

Rabbit anti Human STAT1 alpha antibody recognizes human STAT1 alpha as a single band of ~87 kDa in multiple human cell line lysates by western blotting under reducing conditions. It also cross reacts with rodent cell line lysates tested.

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**Western Blotting**

Anti STAT1 alpha antibody detects a band of approximately 87 kDa in MCF7 cell lysates.

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**Instructions For Use**

Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

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**Lysate Composition**

400µg MCF7 lysate lyophilized in RIPA buffer.

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**Lysate Reconstitution**

- If using DDT reconstitute the lyophilized lysate with 190µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.

- If using BME reconstitute the lyophilized lysate with 180µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.

Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.

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**Storage**

Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for

up to 3 months or at -80°C for longer term storage.

<b>Guarantee</b>	As supplied, 12 months from date of despatch.
<b>Acknowledgements</b>	PrecisionAb™ is a trademark of Bio-Rad Laboratories.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 #10561 available at: Antibody (10040): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a> Lysate Material (10561): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rabbit IgG (H/L) (STAR208...) [HRP](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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