

Datasheet: AHP2685

Description:	RABBIT ANTI STAT3 (pSer727)
Specificity:	STAT3 (pSer727)
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µl

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.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000 - 1/2000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. 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 dependent on sample type.

Target Species	Human
Product Form	Purified IgG - liquid
Antiserum Preparation	Antiserum to STAT3 (pSer727) was raised by repeated immunization of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.02% Sodium Azide 50% Glycerol
Immunogen	Phospho specific-peptide corresponding to residues surrounding serine 727 of human STAT3

External Database Links

UniProt:
[P40763](#) [Related reagents](#)

Entrez Gene:

[6774](#) STAT3 [Related reagents](#)

Synonyms	APRF
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Specificity	<p>Rabbit anti STAT3 (pSer727) antibody recognizes signal transducer and activator of transcription 3 (STAT3), also known as acute-phase response factor, when phosphorylated at serine 727. STAT3 is a member of the STAT family of transcription factors, playing a key role in numerous processes including cell differentiation, proliferation and transformation. Phosphorylation of STAT3 at tyrosine 705 leads to homo- or heterodimerization of STAT3 and is a critical phosphorylation site for STAT3 activity (Huang <i>et al.</i> 2014).</p> <p>Serine 727 is also a key phosphorylation site of STAT3. Serine 727 is phosphorylated by multiple kinases including mitogen-activated kinases (MAPK), mammalian target of rapamycin kinase (mTOR), cyclin-dependent kinase 5 (CDK5) and nemo-like kinase (NLK) (Wakahara <i>et al.</i> 2012). Controversy exists around the effect of phosphorylation at serine 727 (Wakahara <i>et al.</i> 2012). There are reports that the transcriptional activity of STAT3 coincides with phosphorylation at serine 727. Some reports indicate that the transcriptional activity of STAT3 coincides with phosphorylation at serine 727 (Yokogami <i>et al.</i> 2000). Other reports show STAT3 activation independent of serine 727 (Wakahara <i>et al.</i> 2012). The role of serine 727 is likely dependent on the larger cellular context.</p>
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Further Reading	<ol style="list-style-type: none">1. Huang, G. <i>et al.</i> (2014) STAT3 phosphorylation at tyrosine 705 and serine 727 differentially regulates mouse ESC fates. Stem Cells. 32 (5): 1149-60.2. Wakahara, R. <i>et al.</i> (2012) Phospho-Ser727 of STAT3 regulates STAT3 activity by enhancing dephosphorylation of phospho-Tyr705 largely through TC45. Genes Cells. 17 (2): 132-45.
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Storage	<p>Store at -20°C</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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Guarantee	12 months from date of despatch
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Acknowledgements	PrecisionAb is a trademark of Bio-Rad Laboratories
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Health And Safety Information	Material Safety Datasheet documentation #10049 available at: 10049: https://www.bio-rad-antibodies.com/uploads/MSDS/10049.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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