

Datasheet: AHP898

Description:	RABBIT ANTI DARPP-32 (pThr75)
Specificity:	DARPP-32 (pThr75)
Other names:	DOPAMINE-AND cAMP-REGULATED PHOSPHOPROTEIN-32
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting (1)	▪			1/1000

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) For the detection of phosphoproteins, threonine phosphatase inhibitors such as 10mM Sodium Fluoride should be added to the sample buffer. Milk or other casein-based blocking solutions are not recommended as casein is a phosphoprotein and its use can result in high background.

Target Species	Rat
Species Cross Reactivity	Based on sequence similarity, is expected to react with: Dog, Monkey, Mouse, Human, Bovine, Chicken N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Antiserum Preparation	Antisera to phosphorylated rat DARPP-32 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	10mM HEPES pH7.5
Preservative	0.09% Sodium Azide
Stabilisers	0.01% Bovine Serum Albumin

50% Glycerol

Immunogen Synthetic phosphopeptide corresponding to an amino acid sequence within DARPP-32 which includes phosphorylated Thr75.

External Database

Links

UniProt:

[Q6J4I0](#) [Related reagents](#)

Entrez Gene:

[360616](#) Ppp1r1b [Related reagents](#)

Specificity

Rabbit anti Rat DARPP-32 (pThr75) antibody recognises rat DARPP-32, when phosphorylated at threonine 75. DARPP-32 is a 205 amino acid ~32 kDa member of the protein phosphatase inhibitor 1 family. Originally discovered as a substrate for cAMP-dependent protein kinase which modulates cell signalling in neurons. DARPP-32 is converted into an inhibitor of protein phosphatase-1 when phosphorylated by protein kinase A at threonine 34, as a result of dopaminergic receptor stimulation ([Bibb et al. 1999](#)). However this phosphorylation is reversed on stimulation of N-methyl-D-aspartate (NMDA) receptors by glutamate ([Halpain et al. 1990](#)). Conversely when phosphorylated at threonine-75 by CDK5, DARPP-32 becomes an inhibitor of protein kinase A ([Bibb et al. 1999](#)).

DARPP-32 is principally expressed in striatal medium spiny neurons and plays a critical role in the regulation of dopaminergic neurotransmission.

Western Blotting

AHP898 detects a band of approximately 32kDa in rat caudate lysates.

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

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.

Shelf Life

12 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation available at:

Material Safety Datasheet Documentation #10088 available at:

<https://www.bio-rad-antibodies.com/uploads/MSDS/10088.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)

Sheep Anti Rabbit IgG (STAR36...)

[DyLight®488](#), [DyLight®549](#), [DyLight®649](#),
[DyLight®680](#), [DyLight®800](#)

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