

## DARPP32 Rabbit mAb

Catalog No: #48815



Package Size: #48815-1 50ul #48815-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

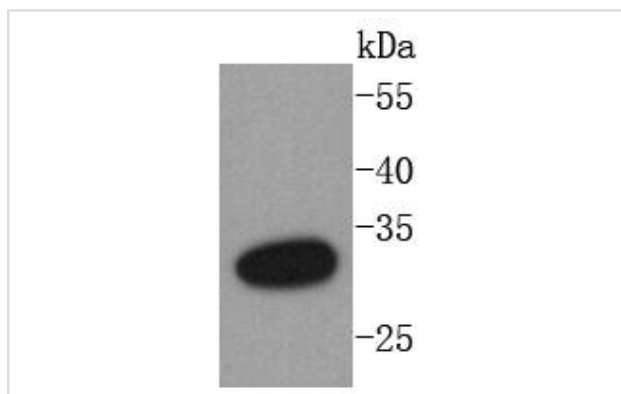
## Description

Product Name	DARPP32 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SU0329
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	DARPP 32 antibody DARPP-32 antibody Dopamine and cAMP regulated neuronal phosphoprotein 32 antibody Dopamine and cAMP regulated neuronal phosphoprotein antibody Dopamine and cAMP regulated phosphoprotein antibody Dopamine and cAMP regulated phosphoprotein DARPP 32 antibody Dopamine and cAMP regulated phosphoprotein DARPP32 antibody Dopamine- and cAMP-regulated neuronal phosphoprotein antibody FLJ20940 antibody IPPD antibody Neuronal phosphoprotein DARPP 32 antibody PPP1R1B antibody PPR1B_HUMAN antibody Protein phosphatase 1 regulatory (inhibitor) subunit 1B antibody Protein phosphatase 1 regulatory inhibitor subunit 1B antibody Protein phosphatase 1 regulatory subunit 1B antibody
Accession No.	Swiss-Prot#:Q9UD71
Calculated MW	32 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

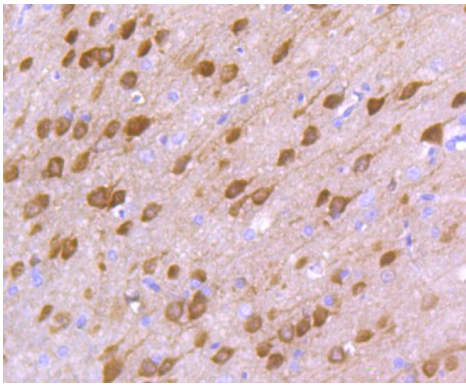
## Application Details

WB: 1:1,000-5,000 IHC: 1:50-1:200 ICC: 1:50-1:200 FC: 1:50-1:100

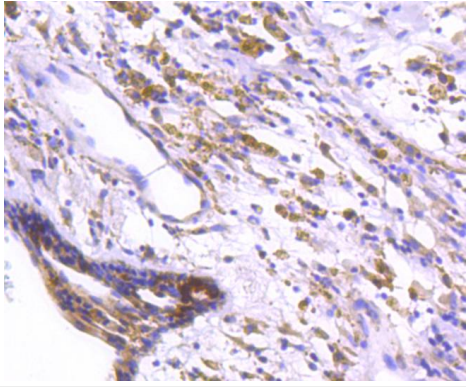
## Images



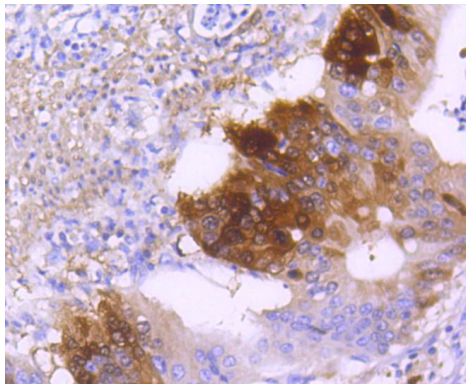
Western blot analysis of DARPP32 on mouse brain lysates using anti-DARPP32 antibody at 1/1,000 dilution.



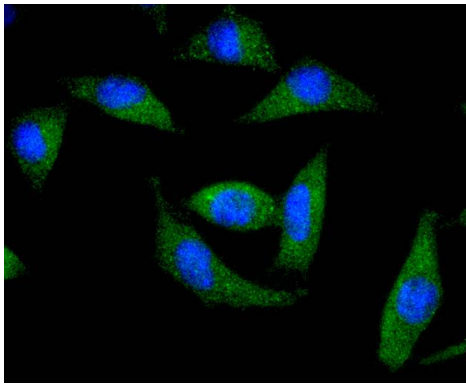
Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-DARPP32 antibody. Counter stained with hematoxylin.



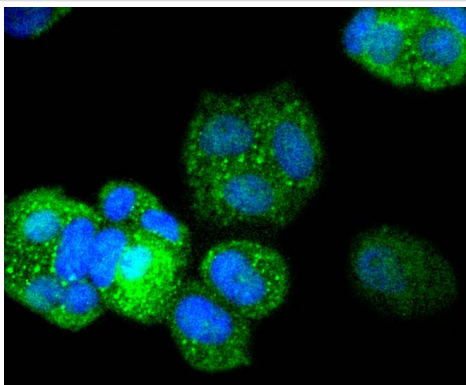
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-DARPP32 antibody. Counter stained with hematoxylin.



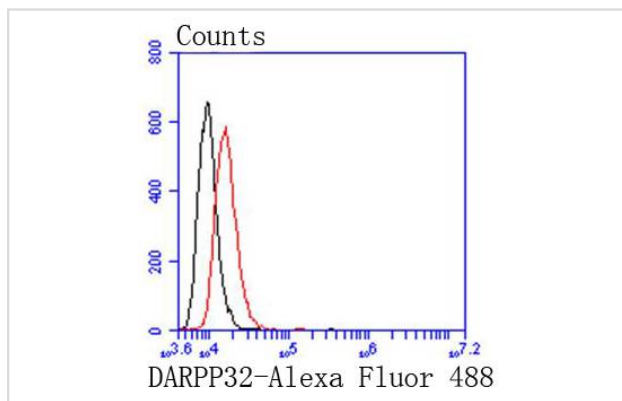
Immunohistochemical analysis of paraffin-embedded human gastric carcinoma tissue using anti-DARPP32 antibody. Counter stained with hematoxylin.



ICC staining DARPP32 in SH-SY-5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining DARPP32 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of HeLa cells with DARPP32 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

## Background

Dopaminergic signaling pathways, which are essential for multiple brain functions, are abnormal in several neurological disorders, such as schizophrenia, Parkinson's disease and drug abuse. DARPP-32 (for dopamine and adenosine 3',5'-monophosphate-regulated phosphoprotein) is abundant in neurons that receive dopaminergic input. Activation of PKA and the consequent phosphorylation of DARPP-32 on threonine occurs in response to dopamine acting upon D1-like receptors. Dopamine interaction with D2-like receptors results in the inhibition of PKA activation, the activation of protein phosphatase 2B and the consequent dephosphorylation of DARPP-32. Neurotransmitters other than dopamine may also be able to stimulate the phosphorylation or dephosphorylation of DARPP-32. Phosphorylated DARPP-32 is a potent inhibitor of PP-1.

## References

1. Murata K et al. Mapping of Learned Odor-Induced Motivated Behaviors in the Mouse Olfactory Tubercle. *J Neurosci* 35:10581-99 (2015).
2. Lewitus GM et al. An adaptive role of TNF $\alpha$  in the regulation of striatal synapses. *J Neurosci* 34:6146-55 (2014).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.