

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850 UNITED STATES Phone: +1-888-267-4436 Fax: +1-301-340-8606

techsupport@origene.com

OriGene Technologies GmbH

Schillerstr. 5 32052 Herford GERMANY Phone: +49-5221-34606-0 Fax: +49-5221-34606-11

info-de@origene.com

AP31330PU-N Polyclonal Antibody to DPYSL2 / CRMP2 (C-term) - Purified

Alternate names: Collapsin response mediator protein 2, DRP-2, Dihydropyrimidinase-related protein 2,

N2A3

Quantity: 50 μl

Concentration: 1.0 mg/ml

Background: DRP-2, also known as Collapsin Response Mediator Protein-2 (CRMP-2), is expressed

at high levels in the developing nervous system and plays a critical role in axonal outgrowth by specifying axon/dendrite fate and establishing neuronal polarity. CRMP-2 enhances axon elongation and branching by binding to tubulin heterodimers to promote microtubule assembly. GSK-3b inactivates CRMP-2 by phosphorylating it at Thr514. CRMP-2 is primed following phosphorylation at Ser522 by CDK5 and at Thr518 by GSK-3b. Phosphorylation of CRMP-2, which decreases tubulin binding ability, can be inhibited by NT-3 and BDNF through the PI3 kinase/Akt pathway.

CRMP-2 also mediates semaphorin-induced growth cone collapse.

Hyperphosphorylation of CRMP-2 and is found in Alzheimer disease plaques with

concurrent elevated GSK-3b activity in these patients.

Uniprot ID: <u>Q16555</u>

NCBI: NP_001184222

GenelD: <u>1808</u>

Host / Isotype: Rabbit / IgG

Immunogen: Synthetic peptide - KLH conjugated

Remarks: Antigen Modification: C-Terminus

Format: State: Liquid purified IgG fraction.

Purification: Immunoaffinity Chromatography.

Buffer System: PBS (without Mg2+, Ca2+), pH 7.4 containing 150 mM Sodium

Chloride, 0.02% Sodium Azide and 50% Glycerol.

Applications: ELISA: 1/1000.

Immunofluorescence: 1/100 - 1/500.

Immunohistochemistry on Paraffin Sections: 1/100.

Western Blot: 1/500 - 1/1000.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody detects endogenous levels of total DPYSL2 protein.

Species Reactivity: Tested: Human.

Expected from sequence similarity: Mouse and Rat.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for

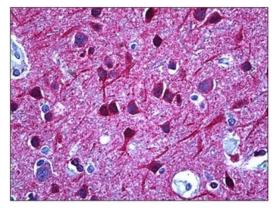
onger.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

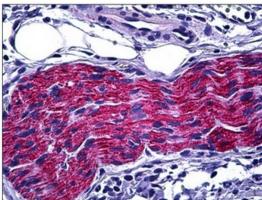


Pictures:

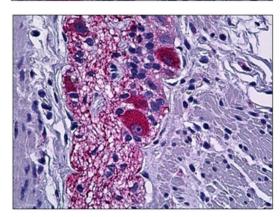
Human Brain, Cortex: Formalin-Fixed, Paraffin-Embedded (FFPE)



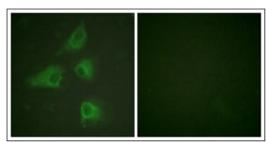
Human Pancreas, Peripheral Nerve: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Colon, Peripheral Nerve: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence analysis of HeLa cells, using DPYSL2 Antibody. The picture on the right is treated with the synthesized peptide.



2/3



Western blot analysis of extracts from A549 cells, treated with EGF 200ng/ml 30', using DPYSL2 antibody. The lane on the right is treated with the synthesized peptide.

