

Product datasheet for **AP31330PU-N**

CRMP2 (DPYSL2) (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	ELISA: 1/1000. Immunofluorescence: 1/100 - 1/500. Immunohistochemistry on Paraffin Sections: 1/100. Western Blot: 1/500 - 1/1000.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide - KLH conjugated
Specificity:	This antibody detects endogenous levels of total DPYSL2 protein.
Formulation:	PBS (without Mg ²⁺ , Ca ²⁺), pH 7.4 containing 150 mM Sodium Chloride, 0.02% Sodium Azide and 50% Glycerol. State: Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	dihydropyrimidinase like 2
Database Link:	Entrez Gene 12934 Mouse Entrez Gene 25416 Rat Entrez Gene 1808 Human Q16555



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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.

Synonyms:

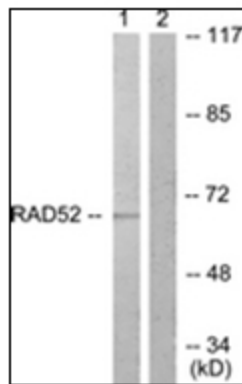
Dihydropyrimidinase-related protein 2, DRP-2, N2A3

Protein Families:

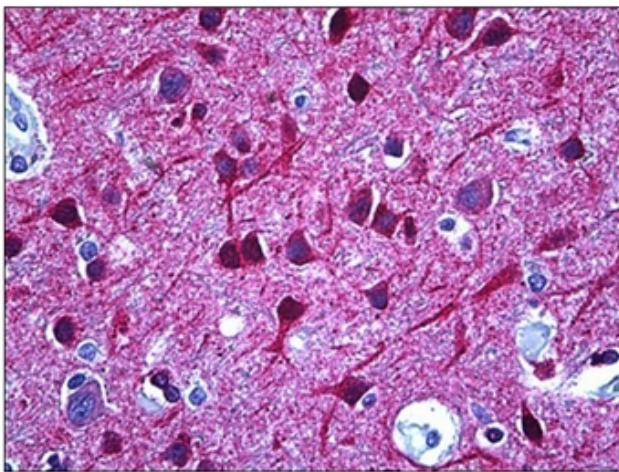
Druggable Genome

Protein Pathways:

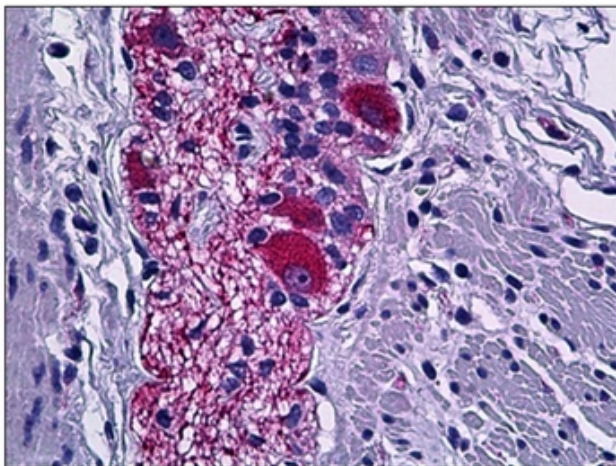
Axon guidance

Product images:

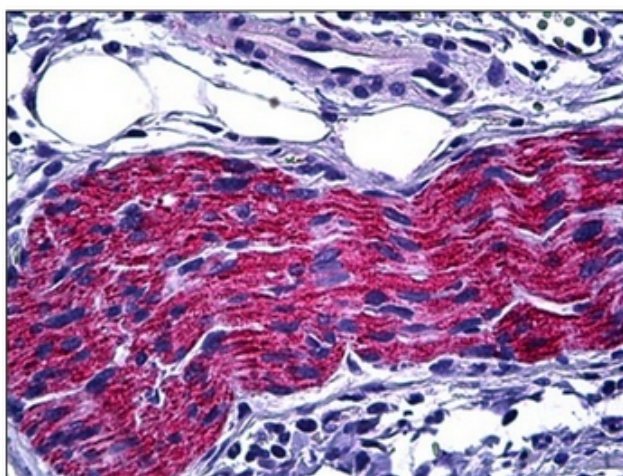
Western blot analysis of extracts from A549 cells, treated with EGF 200ng/ml 30', using DPYSL2 antibody. The lane on the right is treated with the synthesized peptide.



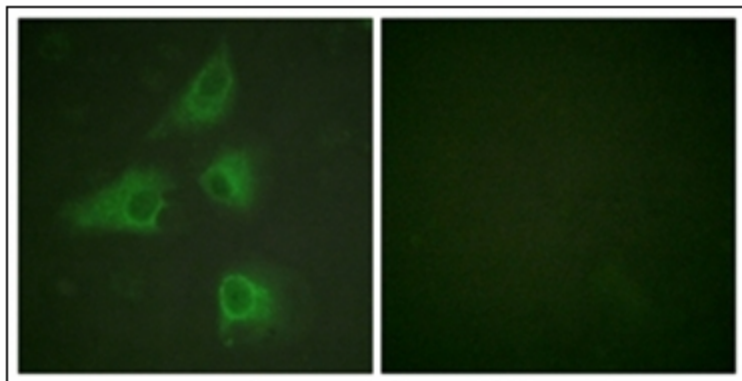
Human Brain, Cortex: Formalin-Fixed, Paraffin-Embedded (FFPE)



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



Human Pancreas, 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.