

DRP-2 Monoclonal Antibody Blocking Peptide

Synthetic peptide Catalog # BP1131a

Specification

DRP-2 Monoclonal Antibody Blocking Peptide - Product Information

Other Accession Q16555

DRP-2 Monoclonal Antibody Blocking Peptide - Additional Information

Target/Specificity

The synthetic peptide sequence used to generate the antibody AM1131a was selected from the region of human DRP-2 Monoclonal. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DRP-2 Monoclonal Antibody Blocking Peptide - Protein Information

DRP-2 Monoclonal Antibody Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

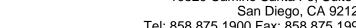
Blocking Peptides

DRP-2 Monoclonal Antibody Blocking Peptide - Images

DRP-2 Monoclonal Antibody Blocking Peptide - 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 (1,2). CRMP-2 enhances axon elongation and branching by binding to tubulin heterodimers to promote microtubule assembly (3). GSK-3? inactivates CRMP-2 by phosphorylating it at Thr514. CRMP-2 is primed following phosphorylation at Ser522 by CDK5 and at Thr518 by GSK-3? (2). Phosphorylation of CRMP-2, which decreases tubulin binding ability, can be inhibited by NT-3 and BDNF through the PI3 kinase/Akt pathway (2). CRMP-2 also mediates semaphorin-induced growth cone collapse (4). Hyperphosphorylation of CRMP-2 and is found in Alzheimer disease plaques with concurrent elevated GSK-3? activity in these patients (5).







DRP-2 Monoclonal Antibody Blocking Peptide - References

Hamajima, N., Gene 180 (1-2), 157-163 (1996)