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MERL Antibody (Center S518) Blocking Peptide

Synthetic peptide
Catalog # BP16583c

Specification

MERL Antibody (Center S518) Blocking Peptide - Product Information

Primary Accession P35240

MERL Antibody (Center S518) Blocking Peptide - Additional Information

Gene ID 4771

Other Names
Merlin, Moesin-ezrin-radixin-like protein, Neurofibromin-2, Schwannomerlin, Schwannomin, NF2, SCH

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.

MERL Antibody (Center S518) Blocking Peptide - Protein Information

Name NF2

Synonyms SCH

Function
Probable regulator of the Hippo/SWH (Sav/Wts/Hpo) signaling pathway, a signaling pathway that plays a pivotal role in tumor suppression by restricting proliferation and promoting apoptosis. Along with WWC1 can synergistically induce the phosphorylation of LATS1 and LATS2 and can probably function in the regulation of the Hippo/SWH (Sav/Wts/Hpo) signaling pathway. May act as a membrane stabilizing protein. May inhibit PI3 kinase by binding to AGAP2 and impairing its stimulating activity. Suppresses cell proliferation and tumorigenesis by inhibiting the CUL4A-RBX1-DDB1-VprBP/DCAF1 E3 ubiquitin-protein ligase complex.

Cellular Location
[Isoform 1]: Cell projection, filopodium membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus. Note=In a fibroblastic cell line, isoform 1 is found homogeneously distributed over the entire cell, with a particularly strong staining in ruffling membranes and filopodia. Colocalizes with MPP1 in non-myelin-forming Schwann cells. Binds with DCAF1 in the nucleus. The intramolecular association of the FERM domain with the C- terminal tail promotes nuclear accumulation. The

unphosphorylated form accumulates predominantly in the nucleus while the phosphorylated form is largely confined to the non-nuclear fractions [Isoform 9]: Cytoplasm, perinuclear region. Cytoplasmic granule. Note=Observed in cytoplasmic granules concentrated in a perinuclear location. Isoform 9 is absent from ruffling membranes and filopodia

Tissue Location
Widely expressed. Isoform 1 and isoform 3 are predominant. Isoform 4, isoform 5 and isoform 6 are expressed moderately. Isoform 8 is found at low frequency. Isoform 7, isoform 9 and isoform 10 are not expressed in adult tissues, with the exception of adult retina expressing isoform 10. Isoform 9 is faintly expressed in fetal brain, heart, lung, skeletal muscle and spleen. Fetal thymus expresses isoforms 1, 7, 9 and 10 at similar levels

MERL Antibody (Center S518) Blocking Peptide - Protocols

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

- Blocking Peptides

MERL Antibody (Center S518) Blocking Peptide - Images

MERL Antibody (Center S518) Blocking Peptide - Background

This gene encodes a protein that is similar to somemembers of the ERM (ezrin, radixin, moesin) family of proteins thatare thought to link cytoskeletal components with proteins in thecell membrane. This gene product has been shown to interact withcell-surface proteins, proteins involved in cytoskeletal dynamicsand proteins involved in regulating ion transport. This gene isexpressed at high levels during embryonic development; in adults,significant expression is found in Schwann cells, meningeal cells,lens and nerve. Mutations in this gene are associated withneurofibromatosis type II which is characterized by nervous systemand skin tumors and ocular abnormalities. Two predominant isoformsand a number of minor isoforms are produced by alternativelyspliced transcripts.

MERL Antibody (Center S518) Blocking Peptide - References

Goutagny, S., et al. Clin. Cancer Res. 16(16):4155-4164(2010)Ferrer, M., et al. Neurosci. Lett. 480(1):49-54(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Seong, M.W., et al. Korean J Lab Med 30(2):190-194(2010)Ahmad, Z., et al. Otol. Neurotol. 31(3):460-466(2010)