

Mouse monoclonal antibody for human lipid phosphate phosphatase-3 (LPP3)

Published date: Sept. 10, 2015

Technology description

UIC inventors have developed a mouse monoclonal antibody which recognizes human lipid phosphate phosphohydrolase 3 (LPP3).

An antibody against the extracellular domain of LPP3 inhibits cell-cell interactions and angiogenesis in vitro. In addition, LPP3 not only catalyzes the dephosphorylation of the bioactive lipid sphingosine-1-phosphate (S1P) to generate sphingosine but also may regulate embryonic development and angiogenesis via the Wnt pathway.

LPP3 also has the ability to potentiate tumor growth by amplifying B-catenin and CYCLIN-D1 activities. Thus, LPP3 is a potential target for inhibiting the growth of glioblastoma (an aggressive type of brain tumor) and other tumors that express high levels of LPP3, and may serve as a link in the acquisition of proliferative, invasive, and metastatic phenotypes.

Application area

A potential anti-tumor therapeutic and/or research tool that works through inhibiting angiogenesis. Can be used for the identification of transformed cells in archival pathological tissue samples such as angiomas, angiosarcomas, endothelioma, pancreatic tumors, and glioblastoma tumors

An antibody that has been validated for use in western blotting, immunoprecipitation, and flow cytometry

A research tool for the identification of transformed cells in archival pathological tissue samples such as angiomas, angiosarcomas, endothelioma, pancreatic tumors, and glioblastoma tumors

A potential anti-tumor therapeutic and/or research tool that works through inhibiting angiogenesis

Institution

University of Illinois, Chicago

Inventors

Kishore Wary

联系我们



叶先生

电话: 021-65679356 手机: 13414935137

邮箱: yeyingsheng@zf-ym.com