

phosphatidylinositol-4,5-bisphosphate 4-phosphatase

Cat. No. EXWM-3683

Lot. No. (See product label)

Introduction

Description Two pathways exist in mammalian cells to degrade 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate [PtdIns(4,5)P₂]. One is catalysed by this enzyme and the other by EC 3.1.3.36, phosphoinositide 5-phosphatase, where the product is PtdIns4P. The enzyme from human is specific for PtdIns(4,5)P₂ as substrate, as it cannot use PtdIns(3,4,5)P₃, PtdIns(3,4)P₂, PtdIns(3,5)P₂, PtdIns5P, PtdIns4P or PtdIns3P. In humans, the enzyme is localized to late endosomal/lysosomal membranes. It can control nuclear levels of PtdIns5P and thereby control p53-dependent apoptosis.

Synonyms phosphatidylinositol-4,5-bisphosphate 4-phosphatase I; phosphatidylinositol-4,5-bisphosphate 4-phosphatase II; type I PtdIns-4,5-P₂ 4-Ptase; type II PtdIns-4,5-P₂ 4-Ptase; IpgD; PtdIns-4,5-P₂ 4-phosphatase type I; PtdIns-4,5-P₂ 4-phosphatase type II; type I phosphatidylinositol-4,5-bisphosphate 4-phosphatase; type 1 4-phosphatase

Product Information

Form Liquid or lyophilized powder

EC Number EC 3.1.3.78

Reaction 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H₂O = 1-phosphatidyl-1D-myo-inositol 5-phosphate + phosphate

Notes This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.