

ACP1 Antibody

Acid Phosphatase-1, Mouse Anti Human
ABM0007

Product Overview

Name ACP1 Antibody

Description

Acid Phosphatase-1, Mouse Anti Human

Synonyms

HAAP, MGC3499, MGC111030, ACP1, Low molecular weight phosphotyrosine protein phosphatase, LMW-PTPase, LMW-PTP, Low molecular weight cytosolic acid phosphatase, Red cell acid phosphatase 1, Adipocyte acid phosphatase.

Introduction

ACP1 is part of the phosphotyrosine protein. ACP1 functions as an acid phosphatase and a protein tyrosine phosphatase (PTPase) existing in all human tissues, including adipocytes. ACP1 enzyme hydrolyzes protein tyrosine phosphate to protein tyrosine and orthophosphate, and also orthophosphoric monoesters to alcohol and orthophosphate. ACP1 is present in adipocytes, thus playing a specific role in the regulation of adipose tissue. High levels of the ACP1 negatively regulate cell proliferation and growth of leiomyomas during dephosphorylation of the PDGF receptor. High significant differences in birth weight-placental weight relationships were observed among acid phosphatase locus 1 phenotypes.

Source

Escherichia Coli.

Physical Appearance

Sterile filtered colorless solution.

Formulation

The ACP1 protein solution contains 20mM MES, pH-6, 0.1mM PMSF, 2mM EDTA and 10% Glycerol.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MAEQATKSVL FVCLGNICRS PIAEAVFRKL VTDQNISENW VIDSGAVSDW

NVGRSPDPRA VSCLRNHGIHTAHKARQITK EDFATFDYIL CMDESNLRDL NRKSNQVKTC KAKIELLSY
DPQKQLIED PYYGNDSDFE TVYQQCVRCC RAFLEKAH.

Specific Activity

> 15,000 Units per 1mg protein.

Unit Definition

One unit is defined as the amount of enzyme that will hydrolyze 1nmole of p-nitrophenyl phosphate per minute at 37°C in MES pH5.0 using 10mM of substrate.

Precautions

ACP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.