
Product Data Sheet

Product Name: p85a Bovine
Cat. No.: GP22428
Batch No.: 1

Product Data

Purity	>98%	Source	Leishmania tarentolae.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Phosphatidylinositol 3-kinase regulatory subunit alpha; PI3-kinase p85 subunit alpha; PtdIns-3-kinase p85-alpha; PI3K; P85a.		
Formulation	Supplied as a 1 mg/ml solution in 25mM HEPES, pH 8.0, 25mM NaCl, 2.5mM MgCl ₂ and 50% glycerol.		

Introduction

P85a functions as the regulatory subunit of the class IA PI3-kinase isoforms a, b, and d. It contains two SH2 domains that bind to tyrosine-phosphorylated growth factor receptors or substrate adaptor proteins. It also contains a BH (breakpoint cluster region homology) domain that shows GAP activity towards the small GTPases Rab4, Rab5, Cdc42, Rac1 and to a lesser extent towards Rab6 and Rab11. It was shown that PI3Ka catalytic subunit mediated phosphorylation of the p85a adapter reduces the lipid kinase activity of the heterodimer and this gives hints for PI3K-dependent signaling events not requiring production of 3 β -phosphorylated phosphoinositides. PI3Ka protein kinase activity has been implicated in IRS-1 serine phosphorylation in insulin-treated adipocytes and in STAT3 and IRS-1 phosphorylation upon activation of the type 1 IFN receptor by IFN- α .

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.

Background

Phosphoinositide 3-kinase subunit p85a Bovine Recombinant has a molecular weight of 83.5 kDa.

Caution: Product has not been fully validated for medical applications. For research use only.

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