

Protein Kinase G I β human, Recombinant

Cat. No. NATE-0580

Lot. No. (See product label)

Introduction

Description

Protein Kinase G I β induces apoptosis in certain cell lines such as human breast cancer cell lines MCF-7 and MDA-MB-468. It inhibits cell proliferation and induces apoptosis in colon cancer cell lines.

Applications

Protein Kinase G is a serine/threonine-specific protein kinase that is activated by cGMP. Protein Kinase G I β is used to induce apoptosis and inhibit cell proliferation.

Synonyms

Protein Kinase G I β ; PRKG1B; PRKGR1B; PKG1B; cGMP-dependent protein kinase 1; cGKI-BETA

Product Information

Species

Human

Source

baculovirus infected insect cells

Form

buffered aqueous glycerol solution

Molecular Weight

mol wt 76 kDa (monomer)

Purity

>95% (SDS-PAGE)

Activity

> 1.5 units/mg protein (20-fold stimulation by cGMP (5 μ M))

Buffer

Solution in 20 mM Tris buffer, pH 7.4, 1 mM EDTA, 1 mM β -mercaptoethanol, 100 mM NaCl, 10 U/ml Trasylol, and 50% glycerol.

Pathway

Adaptive Immune System, organism-specific biosystem; Gap junction, organism-specific biosystem; Gap junction, conserved biosystem; Hemostasis, organism-specific biosystem; Immune System, organism-specific biosystem; Long-term depression, organism-specific biosystem; Long-term depression, conserved biosystem

Function

ATP binding; cGMP binding; cGMP-dependent protein kinase activity; calcium channel regulator activity; nucleotide binding; protein binding; protein serine/threonine kinase activity

Unit Definition

One unit will phosphorylate 1 micromole of VASPtide (RRKVSKQE) substrate per minute in 10 mM HEPES, pH 7.4, 5 mM MgCl₂, 1 mM DTE and 0.2 mM EDTA.

Storage and Shipping Information

Stability

-20°C