

## Protein Kinase G I $\beta$ human, Recombinant

Cat. No. NATE-0580

Lot. No. (See product label)

### Introduction

- Description** Protein Kinase G I $\beta$  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 $\beta$  is used to induce apoptosis and inhibit cell proliferation.
- Synonyms** Protein Kinase G I $\beta$ ; 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  $\mu$ M))
- Buffer** Solution in 20 mM Tris buffer, pH 7.4, 1 mM EDTA, 1 mM  $\beta$ -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 MgCl<sub>2</sub>, 1 mM DTE and 0.2 mM EDTA.

### Storage and Shipping Information

- Stability** -20°C