

## Phosphodiesterase 5A1 from Human, Recombinant

Cat. No. NATE-0527

Lot. No. (See product label)

### Introduction

#### Description

PDE5 regulates vascular smooth muscle contraction and is involved in NO-cGMP signaling in platelets to control aggregation. PDE5 may also be involved in the regulation of cGMP signaling in the brain and may modulate pressure-induced cardiac hypertrophy and fibrosis.

#### Applications

Phosphodiesterase (PDE) is an enzyme that is used to break phosphodiester bonds. PDE5 is a molecular target for the treatment of erectile dysfunction and pulmonary hypertension. PDE5 is used to find novel PDE5 inhibitors.

#### Synonyms

CN5N; phosphodiesterase 5A, cGMP-specific; PDE5A1; PDE5A; 3',5'-cyclic-GMP phosphodiesterase, PDE 5A1

### Product Information

#### Species

Human

#### Source

Sf9 cells

#### Form

Supplied as a solution in 20% glycerol containing 40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 0.04% TWEEN 20 and 3 mM DTT

#### Molecular Weight

126 kDa

#### Pathway

Hemostasis, organism-specific biosystem; Nitric oxide stimulates guanylate cyclase, organism-specific biosystem; Platelet homeostasis, organism-specific biosystem; Purine metabolism, organism-specific biosystem; Purine metabolism, conserved biosystem; cGMP effects, organism-specific biosystem

#### Function

3,5-cyclic-GMP phosphodiesterase activity; 3,5-cyclic-nucleotide phosphodiesterase activity; cGMP binding; hydrolase activity; metal ion binding; nucleotide binding; zinc ion binding

#### Unit Definition

One unit will convert 1.0 picomole of 3',5'-cGMP to 5'-GMP per minute at pH 7.4 at 37°C.

### Storage and Shipping Information

#### Storage

-70°C