Creative Enzymes®

Phosphodiesterase 3B, Recombinant

Cat. No. NATE-0522

Lot. No. (See product label)

Introduction

Description	PDE3 is a phosphodiesterase. The PDEs belong to at least eleven related gene families, which are different in their primary structure, substrate affinity, responses to effectors, and regulation mechanism. Most of the PDE families are composed of more than one gene. PDE3 is clinically significant because of its role in regulating heart muscle, vascular smooth muscle and platelet aggregation. PDE3 inhibitors have been developed as pharmaceuticals, but their use is limited by arrhythmic effects and they can increase mortality in some applications.
Applications	Phosphodiesterase 3B has been used in a study to evaluate the evidence for biological effects of metformin in operable breast cancer. Phosphodiesterase 3B has also been used in a study to investigate the role of intracellular and intercellular communication in perfusion distribution of erythr ocyte-derived ATP.
Synonyms	cyclic 3',5'-mononucleotide phosphodiesterase; PDE; cyclic 3',5'-nucleotide phosphodiesterase; cyclic 3',5'-phosphodiesterase; 3',5'-nucleotide phosphodiesterase; 3':5'-cyclic nucleotide 5'-nucleotidohydrolase; 3',5'-cyclonucleotide phosphodiesterase; cyclic nucleotide phosphodiesterase; 3', 5'-cyclic nucleoside monophosphate phosphodiesterase; 3':5'-monophosphate phosphodiesterase (cyclic CMP); cytidine 3':5'-monophosphate phosphodiesterase (cyclic CMP); cyclic 3',5-nucleotide monophosphate phosphodiesterase; nucleoside 3',5'-cyclic phosphate diesterase; nucleoside-3',5-monophosphate phosphodiesterase; EC 3.1.4.17; PDE3B

Product Information

Source	Sf9 cells
Form	Supplied as a solution in 25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 50% glycerol, and 3 mM DTT
EC Number	EC 3.1.4.17
CAS No.	9040-59-9
Molecular Weight	86 kDa
Unit Definition	One unit will convert 1.0 picomole of 3',5'-cAMP to 5'-AMP per minute at pH 7.4 at 37°C.

Storage and Shipping Information

Storage	−70°C