

## Native Bovine Phosphodiesterase, 3',5'-cyclic-nucleotide-specific

Cat. No. NATE-0515

Lot. No. (See product label)

### Introduction

**Description** Hydrolyzes the 3',5'-phosphodiester bond in cyclic nucleotide monophosphates, such as cAMP and cGMP, to the corresponding nucleotide 5'-monophosphate.

**Applications** May be used to assay the protein activator, calmodulin.

**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

### Product Information

**Species** Bovine

**Source** Bovine brain

**Form** Lyophilized powder containing Tris-HCl buffer salts and lactose

**EC Number** EC 3.1.4.17

**CAS No.** 9040-59-9

**Molecular Weight** mol wt ~60 kDa

**Activity** 15-30 units/mg protein (in the presence of 0.03 mM Ca<sup>2+</sup> and a saturating level (10 units per ml) of calmodulin (P2277))

**Buffer** Reconstitute with 50% glycerol. The total activated units of enzyme will remain constant for at least 5 days when stored at -20°C. However, the calmodulin-deficient activity may increase up to 200%. Both the activated and calmodulin-deficient activity may decrease approximately 30% in 24 hours if stored at 4°C.

**Pathway** Ca-dependent events, organism-specific biosystem; calmodulin binding; protein binding

**Unit Definition** One unit will hydrolyze 1.0 μmole of 3',5'-cyclic-AMP to 5'-AMP per min at pH 7.5 at 30°C.

### Usage and Packaging

**Package** Package size based on activated units

### Storage and Shipping Information

**Storage** -20°C