

## Nitroreductase from Escherichia coli, Recombinant

Cat. No. NATE-0488

Lot. No. (See product label)

### Introduction

**Description** Nitroreductase increases the sensitivity of organisms to nitro-containing drugs such as metronidazole by converting the nitro group to a cytotoxic nitro radical. Shows ability to reduce quinines. Enzyme for activating prodrugs in antibody directed enzyme prodrug therapy.

**Applications** Nitroreductase has been used in a study that used a set of PCR primers to clone a gene encoding a hypothetical nitroreductases (named as Ssap-NtrB) from uropathogenic staphylococcus. It has also been used to improve prodrug activation. Nitroreductase from Escherichia coli has been used in a study to assess anaerobic bacteria as a gene delivery system for cancer treatment. It has also been used in a study to investigate its applications in antibody-directed enzyme prodrug therapy.

**Synonyms** Nitroreductase

### Product Information

**Species** Escherichia coli

**Source** E. coli

**Molecular Weight** monomer mol wt 24 kDa

**Purity** > 90% (SDS-PAGE)

**Pathway** Microbial metabolism in diverse environments, organism-specific biosystem; Nitrotoluene degradation, organism-specific biosystem; Nitrotoluene degradation, conserved biosystem

**Unit Definition** One unit will reduce one  $\mu$ mole of Cytochrome C per minute in the presence of Menadione and NADH at pH 7.4 at 37°C.

### Storage and Shipping Information

**Storage** -20°C