

## 6-Phosphogluconate dehydrogenase from E. coli, Recombinant

Cat. No. NATE-0796

Lot. No. (See product label)

### Introduction

**Description** In enzymology, a phosphogluconate dehydrogenase (decarboxylating) (EC 1.1.1.44) is an enzyme that catalyzes the chemical reaction: 6-phospho-D-gluconate + NADP<sup>+</sup> ↔ D-ribulose 5-phosphate + CO<sub>2</sub> + NADPH. Thus, the two substrates of this enzyme are 6-phospho-D-gluconate and NADP<sup>+</sup>, whereas its 3 products are D-ribulose 5-phosphate, CO<sub>2</sub>, and NADPH. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with NAD<sup>+</sup> or NADP<sup>+</sup> as acceptor.

**Synonyms** 6-Phosphogluconic Dehydrogenase; phosphogluconic acid dehydrogenase; 6-phosphogluconic dehydrogenase; 6-phosphogluconic carboxylase; 6-phosphogluconate dehydrogenase (decarboxylating); 6-phospho-D-gluconate dehydrogenase; EC 1.1.1.44; phosphogluconate dehydrogenase; decarboxylating; 9073-95-4

### Product Information

**Source** E. coli

**Form** Liquid

**EC Number** EC 1.1.1.44

**CAS No.** 9073-95-4

**Molecular Weight** ~ 52.5kD

**Activity** ~ 9 U/mg protein

**Unit Definition** One unit is the amount of enzyme required to convert one μmole of 6-phospho gluconic acid to D-ribulose 5-phosphate per min in TEA buffer at pH 7.6 and 25°C.

### Storage and Shipping Information

**Storage** 4°C