

## Uronate dehydrogenase from *Agrobacterium tumefaciens*, Recombinant

Cat. No. NATE-1575

Lot. No. (See product label)

### Introduction

#### Description

In enzymology, an uronate dehydrogenase (EC 1.1.1.203) is an enzyme that catalyzes the chemical reaction: D-galacturonate + NAD<sup>+</sup> + H<sub>2</sub>O → D-galactarate + NADH + H<sup>+</sup>. The 3 substrates of this enzyme are D-galacturonate, NAD<sup>+</sup>, and H<sub>2</sub>O, whereas its 3 products are D-galactarate, NADH, and H<sup>+</sup>. 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

uronate:NAD<sup>+</sup> 1-oxidoreductase; uronate: NAD-oxidoreductase; uronic acid dehydrogenase; EC 1.1.1.203

### Product Information

**Species** Agrobacterium tumefaciens

**Source** E. coli

**Form** 3.2 M ammonium sulphate

**EC Number** EC 1.1.1.203

**CAS No.** 37250-98-9

**Molecular Weight** 31.14 kDa

**Purity** >95% as judged by SDS-PAGE

**Activity** 3000 U/ml

**Optimum pH** 8

**Optimum temperature** 37 °C

**Unit Definition** One Unit of uronate dehydrogenase was defined as the amount enzyme required to produce 1 μmole of NADH from NAD<sup>+</sup>, in a reaction mixture containing 200mM TrisHCl buffer, pH 8.0, 10 mM D-glucuronic acid and 2.1 mM NAD<sup>+</sup>, at 25°C.

### Storage and Shipping Information

**Storage** Uronate dehydrogenase should be stored at 4 °C or and will remain stable up to 3 years if stored as specified.