

Uronate dehydrogenase (EC 1.1.1.203), *Agrobacterium tumefaciens*

Catalogue number	Presentation
AE00191	24 kU (8 mL)

Description

Recombinant uronate dehydrogenase (EC 1.1.1.203) is purified from a modified *E. coli* strain. Involved in aldohexuronate catabolism, uronate dehydrogenase is an enzyme that catalyzes specifically the reduction of D-glucuronate or D-galacturonate to D-glucarate or D-galactarate, respectively, with concomitant oxidation of NAD⁺ to NADH. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-OH group of donor with NAD⁺ or NADP⁺ as acceptor. The systematic name of this enzyme class is uronate:NAD⁺ 1-oxidoreductase. Other names in common use include uronate: NAD-oxidoreductase, and uronic acid dehydrogenase. The enzyme is provided in 3.2 M ammonium sulphate.

Purity

Uronate has been determined to be >95% pure, according to SDS polyacrylamide gel electrophoresis (PAGE) followed by Blue Safe staining (Figure 1).

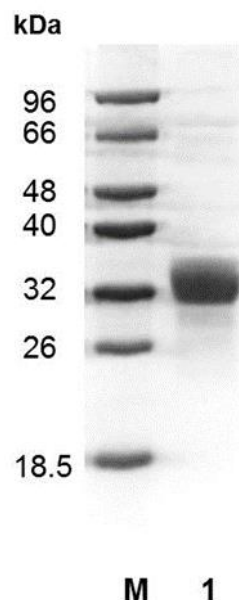


Figure 1. SDS-PAGE analysis of *A. tumefaciens* uronate dehydrogenase. Electrophoresis was performed using a 14% polyacrylamide gel. Lane M, molecular weight marker; Lane 1, purified uronate dehydrogenase (31.14 kDa).

Storage temperature

Uronate dehydrogenase should be stored at 2 °C to 8 °C.

Temperature and pH optimum

The optimum pH and temperature are 8.0 and 37 °C, respectively.

Activity

3000 U/ml.

Unit Definition

One Unit of uronate dehydrogenase was defined as the amount enzyme required to produce 1 μ mole of NADH from NAD⁺, in a reaction mixture containing 200mM Tris-HCl buffer, pH 8.0, 10 mM D-glucuronic acid and 2.1 mM NAD⁺, at 25°C.

For life science research only. Not for use in diagnostic procedures.