

## UDP-Glc Dehydrogenase from Streptococcus pyogenes, Recombinant

Cat. No. NATE-1501

Lot. No. (See product label)

### Introduction

#### Description

UDP-glucose 6-dehydrogenase is a cytosolic enzyme that in humans is encoded by the UGDH gene. The protein encoded by this gene converts UDP-glucose to UDP-glucuronate and thereby participates in the biosynthesis of glycosaminoglycans such as hyaluronan, chondroitin sulfate, and heparan sulfate. These glycosylated compounds are common components of the extracellular matrix and likely play roles in signal transduction, cell migration, and cancer growth and metastasis. The expression of this gene is up-regulated by transforming growth factor beta and down-regulated by hypoxia.

#### Synonyms

UDP-glucose 6-dehydrogenase; UDP-glucose dehydrogenase; uridine diphosphoglucose dehydrogenase; UDPG dehydrogenase; UDPG:NAD oxidoreductase; UDP-alpha-D-glucose:NAD oxidoreductase; UDP-glucose:NAD+ oxidoreductase; uridine diphosphate glucose dehydrogenase; UDP-D-glucose dehydrogenase; uridine diphosphate D-glucose dehydrogenase; EC 1.1.1.22

### Product Information

#### Species

Streptococcus pyogenes

#### Source

E. coli

#### EC Number

EC 1.1.1.22

#### CAS No.

9028-26-6

#### Purity

min 95% by SDS-PAGE

#### Unit Definition

One unit will oxidize 1.0  $\mu$ mole of UDP-glucose to UDP-glucuronic acid per min at pH 8.7 at 25 °C.