Creative Enzymes®

D-2-Hydroxyglutarate Dehydrogenase from Acidaminococcus fermentans, Recombinant

Cat. No. NATE-1660

Lot. No. (See product label)

Introduction

Description	D-2-hydroxyglutarate (D2HG) level is significantly increased in metabolic diseases and various cancers such as acute myeloid leukemia. Studies suggest that the detection of D2HG serves as a biomarker assay related to IDH (isocitrate dehydrogenase) mutations. D2HGDH is a special NAD-dependent enzyme which reacts with D2HG specifically and converts D2HG to α-ketoglutarate. D2HGDH is a key enzyme to distinguish between two metabolites, D2HG and L-2-hydroxyglutarate (L2HG), during biomarker assays.
Synonyms	D-2-hydroxyglutarate dehydrogenase; D2HGDH; D2HGD

Product Information

Species	Acidaminococcus fermentans
Source	E. coli
Form	Lyophilized in 50mM Tris, pH 8 without any additives.
EC Number	EC 1.1.99.39
Molecular Weight	39 kDa
Purity	> 99% by SDS - PAGE
Activity	> 90,000 mU/mg
Unit Definition	One unit is the amount of enzyme that reduces 1.0 µmole of NAD+ to NADH per min. at pH 8 at 37°C.)

Usage and Packaging

Reconstitution	Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-5 mg/ml. The solution can be diluted into other aqueous buffers and stored at –20°C for future use.

Storage and Shipping Information

Storage	Can be stored at 4°C up to 2 weeks. For long term storage, aliquot and store at -20°C. Avoid repeated freezing and thawing cycles.