Glycerol dehydrogenase from Cellulomonas sp
Product Code: 182640
EC: 1.1.1.6

SKU: 182640
Category: Enzymes

PRODUCT DESCRIPTION

SPECIFICATIONS
EC 1.1.1.6

Product name Glycerol:NAD+ 2-oxidoreductase

Appearance White amorphous powder, lyophilized

Activity Grade III, 50 U/mg-solid or more (containing 50% of stabilizers)

Contaminants NADH oxidase : ≤ 1.0×10-3 %

Stabilizers BSA

Stability Stable at □20℃ for at least 12 month

Molecular weight approx. 390,000

Isoelectric point 4.4±0.1

Michaelis constants 1.1×10-2M (Glycerol), 8.9×10-5M (NAD+)

Structure 10 subunits (42,000) per mol of enzyme

Inhibitors p-Chloromercuribenzoate, o-phenanthroline, monoiodoacetate, heavy metal ions (Co2+, Ni2+, Cu2+, Zn2+, Cd2+)

Optimum pH 10.0□10.5

Optimum temperature 50℃

pH Stability pH 7.5□10.5 (25℃, 20hr)

Thermal stability below 55℃ (pH 7.5, 15min)

Substrate specificity This enzyme has the highest specificity for glycerol and 1,2-propanediol, and also oxidizes glycerol-α-monochlorohydrin, ethylene glycol and 2,3-butanediol. The oxidative reaction is stimulated by K+, NH4+ and Rb+.