GALACTOSE DEHYDROGENASE from soil prokaryote (Lot 60501d)

Recombinant

E-GALDH **05/20**

(EC 1.1.1.48) D-galactose:NAD^+ 1-oxidoreductase

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 36,659)
- Single major band on isoelectric focusing (pI ~ 6.0)

2. SPECIFIC ACTIVITY:

278 U/mg protein at pH 8.6 and 25°C.

One Unit of galactose dehydrogenase is defined as the amount of enzyme required to produce one µmole of NADH from NAD^+ under the following assay conditions:

Tris.HCl buffer, pH 8.6 93 mM
NAD^+ 2.26 mM
BSA 0.4 mg/mL
EDTA 1.9 mM
D-Galactose 17.2 mM

3. OTHER ACTIVITIES (as a percentage of galactose dehydrogenase activity):

Enzyme Measured	Substrate	Activity, %
Galactose dehydrogenase	D-galactose	100
α-Galactosidase	*p*NP-α-D-galactose	< 0.0001
β-Galactosidase	*p*NP-β-D-galactose	~ 0.0002
NADH oxidase	NADH	< 0.0002

4. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 8.6 and up to 40°C.

5. STORAGE AND USE CONDITIONS/RECOMMENDATIONS:

The enzyme is supplied as an ammonium sulphate suspension and should be stored at 4°C. **Swirl to mix the enzyme suspension immediately prior to use. Do not dilute prior to use.**

For the measurement of galactose refer to the Lactose/Galactose Assay Kit booklet (product code: K-LACGAR) at www.megazyme.com.