



myo-INOSITOL DEHYDROGENASE from *B. subtilis* (Lot 70901b)

Recombinant

E-INDHBS

04/15

(EC 1.1.1.18) Inositol 2-dehydrogenase; *myo*-Inositol : NAD⁺ 2-oxidoreductase

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 39,417)
- Single major band on isoelectric focusing (pI ~ 5.3)

2. SPECIFIC ACTIVITY:

67.5 U/mg protein at pH 9.6 and 25°C.

One Unit of *myo*-inositol dehydrogenase is defined as the amount of enzyme required to produce one μ mole of *scyllo*-inosose and NADH from *myo*-inositol and NAD⁺ per minute at 25°C under the following assay conditions:

Glycylglycine buffer, pH 9.6	492 mM
<i>myo</i> -Inositol	123 mM
NAD ⁺	4.9 mM

3. RELATIVE RATES OF ACTIVITY:

Substrate	Relative Rates
<i>myo</i> -Inositol	100
β -D-glucose	~ 23.0
β -D-xylose	~ 23.6

Activities on these substrates were determined at a final substrate concentration of 123 mM under assay conditions as described above.

4. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 9.6 and up to 25°C.

5. STORAGE AND USE CONDITIONS/RECOMMENDATIONS:

The enzyme is supplied as an ammonium sulphate suspension and should be stored at 4°C. For assay, this enzyme should be diluted in assay buffer. **Swirl to mix the enzyme suspension immediately prior to use.**