ASPARAGINASE from *E. coli* (Lot 140901a)

Recombinant

E-ASNEC **09/14**

(EC 3.5.1.1) L-asparagine amidohydrolase

PROPERTIES:

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 37,900)
- One major bands on isoelectric focusing (pI ~ 6.3)

2. SPECIFIC ACTIVITY:

35 U/mg protein at pH 8.0 and 25°C; ~35 U/mg protein at pH 8.0 and 37°C.

One Unit of asparaginase is defined as the amount of enzyme required to produce one µmole of $NADP^+$ from NADPH under the following assay conditions:

Tris.HCl buffer, pH 8.0	45 mM
Asparagine	7.3 mM
α-Ketoglutaric acid	0.9 mM
NADPH	0.26 mM
Glutamate dehydrogenase	3.4 U/mL

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

Enzyme Measured	Substrate	Activity, %
Asparaginase	L-asparagine	100
NADH oxidase	NADH	< 0.0001
NADPH oxidase	NADPH	< 0.0001

4. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 8.0 and up to 37°C.

5. STORAGE AND USE CONDITIONS/RECOMMENDATIONS:

The enzyme is supplied as an lithium sulphate suspension and should be stored at 4°C.
Swirl to mix the enzyme suspension immediately prior to use.