

endo-1,4-β-XYLANASE M6 (from rumen microorganism) (Lot 80202d)

E-XYRU6 07/14

(EC 3.2.1.8) 4-beta-D-xylan xylanohydrolase

PROPERTIES

I. ELECTROPHORETIC PURITY:

- Single band on SDS-PAGE (MW = 26,500)
- Several bands on isoelectric focusing: (major bands pl's 6.0, 6.6 and 6.9) (minor bands pl's 3.6-5.1 and 7.0)

2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:

Substrate	Specific Activity (U/mg at 40°C; pH 6.0)
Wheat arabinoxylan	380
CM-Cellulose 4M	< 0.001
Barley B-Glucan	< 0.001
Carob Galactomannan	< 0.001
p-Nitrophenyl α -L-arabinofuranoside	< 0.001
p-Nitrophenyl β-xyloside	< 0.001
Casein (protease)	< 0.001

3. PHYSICOCHEMICAL PROPERTIES:

pH Optima: 5.5-6.5 (5 min assay period)

pH Stability: 6.0-8.5 (very unstable below pH 5.5)

Temperature Optima: 55°C
Temperature Stability: 55°C

4. STORAGE CONDITIONS:

The enzyme is supplied as an ammonium sulphate suspension in 0.02% sodium azide and should be stored at 4°C.

The concentration of enzyme as supplied is approximately 2100 U/mL.

For the assay, enzyme preparation is diluted in 0.1M sodium acetate buffer pH 6.0 containing BSA (0.5 mg/mL). If BSA is excluded from the buffer lower activities are obtained.