

## FERULOYL ESTERASE (rumen microorganism)

08/23

**Recombinant****E-FAERU**

EC: 3.1.1.73

**Synonyms:** feruloyl esterase; 4-hydroxy-3-methoxycinnamoyl-sugar hydrolase**CAZy Family:** CE1**CAS:** 134712-49-5/224306-54-1/224306-55-2**Refer to the product lot number Certificate of Analysis for lot specific properties.****PROPERTIES****1. ELECTROPHORETIC PURITY:**

- Single band on SDS-gel electrophoresis (MW ~ 29,000)
- One major band on isoelectric focusing (pI ~ 5.7)

**2. SPECIFICITY:**

Catalyses the hydrolysis of the 4-hydroxy-3-methoxycinnamoyl (feruloyl) group from an esterified sugar, which is usually arabinose in “natural” substrates.

**3. PHYSICOCHEMICAL PROPERTIES:**

Recommended conditions of use are at pH 6.0-8.0 and up to 45°C.

pH Optima: 7.0

pH Stability: 6.0-9.0 (> 75% control activity after 24 h at 4°C)

Temperature Optima: 40°C (10 min reaction)

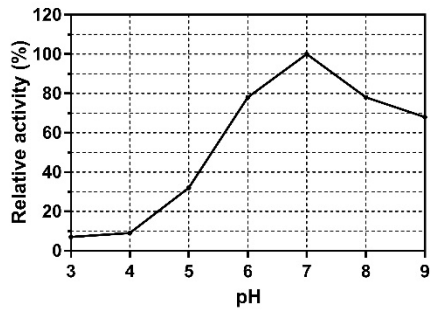
Temperature Stability: up to 45°C (> 75% control activity after 15 min incubation at temperature)

**4. STORAGE CONDITIONS:**

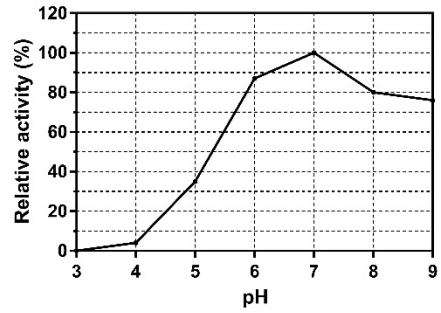
The enzyme is supplied as a suspension in 3.2 M ammonium sulphate containing 50% 0.02% (w/v) sodium azide and should be stored at 4°C. For assay, this enzyme should be diluted in sodium phosphate buffer (100 mM), pH 6.5 containing 1 mg/mL BSA. **Swirl to mix the enzyme immediately prior to use.**

5. EXPERIMENTAL DATA:

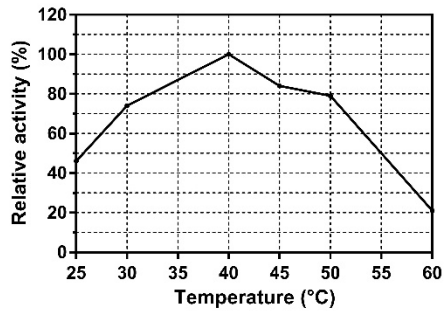
pH Optima



pH Stability



Thermal Optima



Thermal Stability

