Recombinant

**E-ENLEV**  
(EC 3.2.1.65) 2, 6-beta-D-fructan fructohydrolase  
CAZy Family: GH32  
CAS: 9041-11-6  
03/18

**PROPERTIES**

1. **ELECTROPHORETIC PURITY:**  
   - Single band on SDS-gel electrophoresis (MW ~ 57,100)  
   - One major band on isoelectric focusing (pI ~ 4.9)

2. **SPECIFIC ACTIVITY:**  
   210 U/mg protein (on levan) at pH 6.0 and 40°C  
   **One Unit** of endo-levanase activity is defined as the amount of enzyme required to release one μmole of β-D-fructose reducing-sugar equivalents per minute from levan (10 mg/mL) in sodium maleate buffer (100 mM), pH 6.0 at 40°C.

3. **SPECIFICITY:**  
   Random hydrolysis of 2, 6-β-D-fructofuranosidic linkages in 2, 6-β-D-fructans (levans) containing more than 3 fructose units.

4. **PHYSICOCHEMICAL PROPERTIES:**  
   Recommended conditions of use are at pH 5.5-6.5 and up to 40°C.  
   - pH Optima: 6.0  
   - pH Stability: 4.5-8.0 (> 75% control activity after 24 h at 4°C)  
   - Temperature Optima: 50°C (10 min reaction)  
   - Temperature Stability: up to 40°C (> 75% control activity after 15 min incubation at temperature)

5. **STORAGE CONDITIONS:**  
   The enzyme is supplied as an ammonium sulphate suspension containing 0.02% (w/v) sodium azide and should be stored at 4°C. For assay, this enzyme should be diluted in sodium maleate buffer (100 mM), pH 6.0. **Swirl to mix the enzyme immediately prior to use.**
6. EXPERIMENTAL DATA:

- **pH Optima**
  - Relative activity (%) vs pH
  - Graph showing activity peaks at pH 5.5 and 7.0.

- **pH Stability**
  - Relative activity (%) vs pH
  - Graph showing stability from pH 4.5 to 7.5.

- **Thermal Optima**
  - Relative activity (%) vs Temperature (°C)
  - Graph showing activity peak at 50°C.

- **Thermal Stability**
  - Relative activity (%) vs Temperature (°C)
  - Graph showing stability from 20°C to 50°C, then decline.