



## *endo*-INULINASE from *Aspergillus niger* (Lot 121001a)

### **Recombinant**

### **E-ENDOIAN**

12/12

(EC 3.2.1.7) 1-beta-D-fructan fructanohydrolase; 2,1-beta-D-fructanfructanohydrolase  
CAZy: GH Family 32

### **PROPERTIES**

#### **1. ELECTROPHORETIC PURITY**

- Single band on SDS-gel electrophoresis (MW ~ 56,800)
- Single major band on isoelectric focusing (pI ~ 4.9)

#### **2. SPECIFIC ACTIVITY**

**587 U/mg protein (on inulin) at pH 4.5 and 60°C; 316 U/mg protein (on inulin) at pH 4.5 and 40°C.**

**One Unit** of *endo*-inulinase activity is defined as the amount of enzyme required to release one µg of β-D-fructose reducing-sugar equivalents per minute from inulin (20 mg/mL) in sodium acetate buffer (100 mM) at pH 4.5.

#### **3. SPECIFICITY:**

Endo-acting hydrolysis of β-2,1-D-fructosidic bonds of inulin.

#### **4. RELATIVE RATES OF HYDROLYSIS OF SUBSTRATES:**

Substrate	%
Inulin (Raftiline) (20 mg/mL)	100
Inulin (dahlia) (10 mg/mL)	~ 95

Action on all polysaccharides and was determined was determined in sodium acetate buffer (100 mM), pH 4.5 at 60°C.

#### **5. PHYSICOCHEMICAL PROPERTIES:**

Recommended conditions of use are at pH 4.5 - 5.5 and 40°C - 60°C.

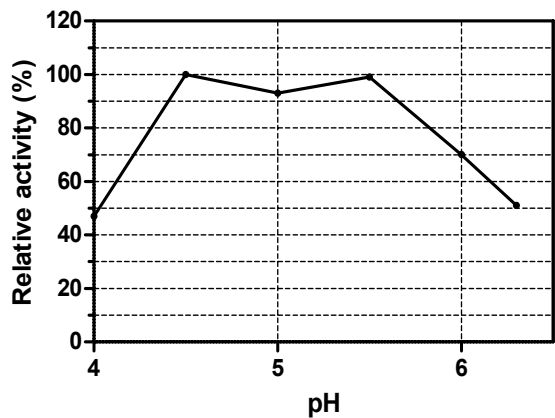
- pH Optima: 4.5 - 5.5  
 pH Stability: 3.0 - 8.0 (> 75% control activity after 24 hours at 4°C)  
 Temperature Optima: 60°C (10 min. reaction)  
 Temperature Stability: up to 40°C

#### **6. STORAGE CONDITIONS**

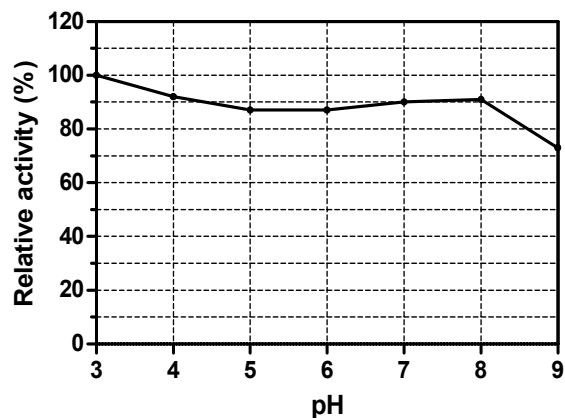
The enzyme is supplied as an ammonium sulphate suspension in 0.02% (w/v) sodium azide and should be stored at 4°C. For assay, this enzyme should be diluted in sodium acetate buffer (100 mM), pH 4.5 containing 1 mg/mL BSA. **Swirl to mix the enzyme immediately prior to use.**

## 7. EXPERIMENTAL DATA

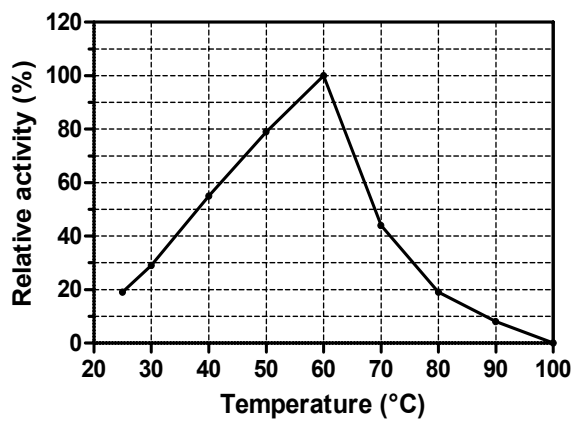
### pH Optima



### pH Stability



### Thermal Optima



### Thermal Stability

