



## *endo*-INULINASE (*Aspergillus niger*) (Lot 140303a)

### Recombinant

### E-ENDOIAN

03/21

(EC 3.2.1.7) 1-beta-D-fructan fructanohydrolase; 2,1-beta-D-fructanfructanohydrolase  
CAZy Family: GH32

### 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

**240 U/mg protein (on inulin) at pH 4.5 and 40°C;**

440 U/mg protein (on inulin) at pH 4.5 and 60°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*-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)

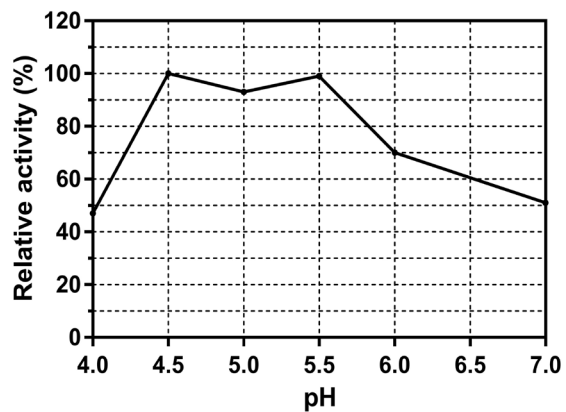
Temperature Stability: up to 40°C

#### 6. STORAGE CONDITIONS

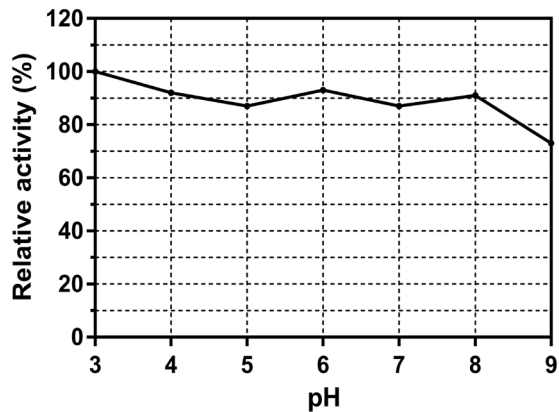
The enzyme is supplied as an ammonium sulphate suspension in 0.02% (w/v) sodium azide and should be stored at 4°C. For assay, this enzyme should be diluted in sodium acetate buffer (100 mM), pH 4.5 containing 1 mg/mL BSA. **Swirl to mix the enzyme immediately prior to use.**

## 7. EXPERIMENTAL DATA

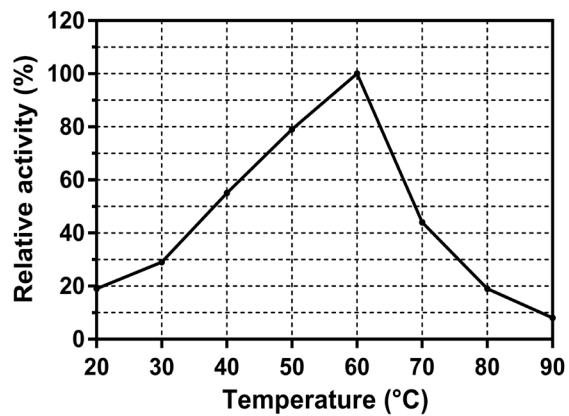
### pH Optima



### pH Stability



### Thermal Optima



### Thermal Stability

