

Purified FRUCTANASE Mixture for Fructan Determination (Lot 180401)

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(EC 3.2.1.7) endo-inulinase (EC 3.2.1.80) fructan β -fructosidase CAZy Family: GH32

This enzyme preparation is designed for use in the measurement of fructan (inulin) by the procedure of Orafti (AOAC Method 997.08). The procedure recommends the use of Fructozyme (Novo SP 230), which is a fermentation product containing highly active exo-inulinase and endo-inulinase. However, Fructozyme also contains other enzymes at activity levels which interfere with the specific measurement of fructan or, alternatively, result in depolymerisation, and thus underestimation, of other dietary fibre components if this preparation is used in the standard AOAC dietary fibre methods to remove insoluble fructan.

Fructanase Mixture (Purified)

Components:

exo-Inulinase 20,000 U (on kestose at 40°C) endo-Inulinase I,000 U (on fructan at 40°C)

 α -Galactosidase 0.16 U (on *p*-nitrophenyl α -galactoside at 40°C)

β-Glucanase I.4 U (on β-glucan at 40°C)

Pectinase 2.0 U (on polygalacturonic acid at 40°C).

Contamination of Fructanase Preparations by other Enzymes (Activity, % of exo-Inulinase)

| Enzyme | Fructanase Mixture Purified | Fructozyme |
|-------------------------|-----------------------------|------------|
| exo-Inulinase | 100 | 100 |
| α -Galactosidase | 0.008 | 15.2 |
| β-Glucanase | 0.007 | 0.3 |
| Pectinase | 0.009 | 2 |

STORAGE CONDITIONS:

This enzyme is supplied as a freeze-dried powder. It should be stored at -20°C. This enzyme preparation MUST be recovered from the bottle by dissolution in water (not buffer). Subsequent dilutions can then be performed in appropriate buffer.

For assay, enzyme preparation is diluted in 100 mM of sodium acetate buffer (pH 4.5) containing BSA (I mg/mL). If BSA is excluded from the buffer, lower activities are obtained.

Once dissolved, store the enzyme in polypropylene container at -20°C.