



Pure FRUCTANASE Mixture for Fructan Determination (Lot 191001a)

Ultrapure Recombinant

E-FRLQPU

10/19

Source: *Aspergillus niger*

(EC 3.2.1.7) *endo*-inulinase, 1-beta-D-fructan fructanohydrolase

(EC 3.2.1.80) *exo*-inulinase, fructan β -fructosidase

CAZy Family: GH32

CAS: 9001-57-4, 9025-67-6, 37288-56-5

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 fiber components if this preparation is used in the standard AOAC dietary fiber methods to remove insoluble fructan.

Fructanase Mixture (Ultrapure Recombinant) (10 mL)

Components:

exo-Inulinase 2,000 U/mL (on kestose at 40°C)

endo-Inulinase ~ 100 U/mL (on fructan at 40°C)

NOTE 1: This is a mixture of pure *exo*-Inulinase and *endo*-Inulinase.

NOTE 2: For assay, enzyme preparation is diluted in 100 mM of sodium acetate buffer (pH 4.5) containing BSA (1 mg/mL). If BSA is excluded from the buffer, lower activities are obtained.

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

Enzyme	Fructanase Mixture Purified (E-FRMXPD)	Pure Fructanase (E-FRLQPU)
<i>exo</i> -Inulinase	100	100
α -Galactosidase	0.004	0
β -Glucanase	0.002	0
Pectinase	0.03	0

This enzyme is supplied in a stabilised solution containing 50% glycerol and 0.02% sodium azide. It should be stored below -10°C between use.

For use in the AOAC/Orafti method, use the same volumes as recommended for Novo SP 230 (Fructozyme).