



Purified FRUCTANASE Mixture for Fructan Determination (Lot 120901a)

E-FRMXPD

09/15

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) E-FRMXPD (Freeze-dried powder)

Components:

<i>exo</i> -Inulinase	20,000 U (on kestose at 40°C)
<i>endo</i> -Inulinase	650 U (on fructan at 40°C)
α -Galactosidase	2.7 U (on <i>p</i> -nitrophenyl α -galactoside)
β -Glucanase	1.9 U (on β -glucan at 40°C)
Pectinase	1.2 U (on pectin at 40°C).

NOTE 1: This product has been purified to remove most of the α -galactosidase, β -glucanase and pectinase which interfere with the use of the preparation in the measurement of fructan, or in the solubilisation of “insoluble” fructan in the AOAC Total Dietary Fibre Methods.

NOTE 2: This enzyme preparation **MUST** be recovered from the bottle by dissolution in water (not buffer). Subsequent dilutions can then be performed in appropriate buffer.

NOTE 3: 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.

NOTE 4: Once dissolved, store the enzyme in polypropylene container at -20°C.

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

Enzyme	Fructanase Mixture Purified	Fructozyme
<i>exo</i> -Inulinase	100	100
α -Galactosidase	0.013	15.2
β -Glucanase	0.009	0.3
Pectinase	0.006	2

This enzyme is supplied as a freeze-dried powder. It should be stored at -20°C.