



FRUCTANASE Mixture for Fructan Determination (Lot 180406a)

Non-recombinant

E-FRMXLQ

11/20

EC number: *endo*-Inulinase: (3.2.1.7) | *endo*-beta-D-fructan fructanohydrolase,
exo-Inulinase: (3.2.1.80) | fructan β -fructosidase

CAZy Family: GH32

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

PROPERTIES

1. SPECIFICITY:

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.

NOTE: Where an Ultra-Pure enzyme mixture is required Fructanase Mixture (Ultrapure, recombinant) Cat No. **E-FRLQPU** or **E-FRPDPU** should be used.

2. RELATIVE RATES OF HYDROLYSIS OF SUBSTRATES:

Substrate	Enzyme	%
Kestose	<i>exo</i> -Inulinase	100
Fructan	<i>endo</i> -Inulinase	10
pNP- α -galactoside	α -Galactosidase	0.01
β -glucan	β -glucanase	0.03

Action on pNP-substrates and polysaccharides or oligosaccharides was determined at a final substrate concentration of 5 mg/mL and 5 mM, respectively, in sodium phosphate acetate (100 mM) containing BSA (1 mg/mL), pH 4.5 at 40°C.

3. CONDITIONS OF USE:

The enzyme is supplied as a solution containing 50% glycerol and 0.02% (w/v) sodium azide and should be stored below -10°C. For assay, this enzyme should be diluted in sodium acetate buffer (100 mM), pH 6.5 containing 1 mg/mL BSA. **Swirl to mix the enzyme immediately prior to use.**

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