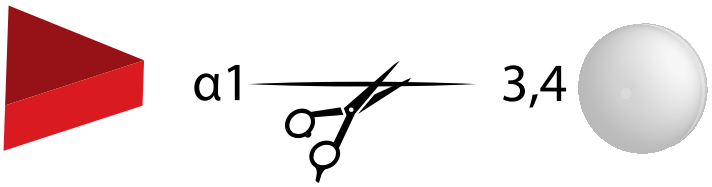

α-(1-3,4) Fucosidase

α-L-Fucoside fucohydralase

Source

Xanthamonas manihotis

Catalog Numbers

E-F134	60 µl
E-F134-20	20 µl
E-F134-200	200 µl

EC 3.2.1.51

Recommended Reagents

included with E-F134:

1 vial: 5x Reaction buffer
250 mM $NaHPO_4$, pH 5

Activity ≥ 0.5 U/ml
Specific Activity ≥ 2 U/mg

Application

Deglycosylating of proteins with Lewis structures

Molecular Weight ~55,000 daltons

Specific Activity

One unit of QA-Bio Fucosidase is defined as the amount of enzyme required to cleave 1 µmole of fucose from Lewis X trisaccharide, 4-methylumbelliferyl glycoside in 1 minute at 37°C, pH 5.0.

Specificity

α-(1-3,4)-Fucosidase cleaves α-(1-3) and α-(1-4) -linked fucose GlcNAc of a Gal-GlcNAc disaccharide structure. The presence of sialic acid (but not fucose) linked to the galactose will block cleavage.

Formulation

The enzyme is provided as a sterile-filtered solution in 20 m*M* Tris HCl pH 7.5 and 25 mM NaCl.

Stability

Stable at least 24 months when stored properly. Several days exposure to ambient temperatures will not reduce activity.

Storage

Store enzyme at 4°C. Do not freeze.

Purity

QA-Bio α-(1-3,4) Fucosidase is tested for contaminating protease as follows: 10 µg of denatured BSA is incubated at 37°C for 24 hours with 2 µl of enzyme. SDS-PAGE analysis of the treated BSA shows no evidence of degradation.

Each lot is also tested for contaminating activities by incubating the enzymes with the appropriate substrates for 24 hours; the detection limit is 5 µU/ml (IUB). A passing lot will have no detectable activity.

α-(1-3,4) Fucosidase

Specifications - Protocol

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phone (Europe) +48 22 104 0892
phone (USA) +1 760 249 2664

Directions for use

1. Add up to 1 nmol of oligosaccharide to tube.

2. Add de-ionized water to a total of 15 µl.

3. Add 4 µl 5x Reaction Buffer 5.0.

4. Add 1 µl α-(1-3,4) Fucosidase.

5. Incubate 1 hour at 37°C.

Progress may be monitored by SDS-PAGE if the size differential between native and de-glycosylated protein is sufficient for detection.

Warranties and liabilities

QA-Bio, Inc warrants that the above product conforms to the specifications described herein. Should the product fail for reasons other than through misuse QA-Bio, Inc will, at its option, replace free of charge or refund the purchase price. This warranty is exclusive and QA-Bio, Inc makes no other warrants, expressed or implied, including any implied conditions or warranties of merchantability or fitness for any particular purpose. QA-Bio, Inc shall not be liable for any incidental, consequential or contingent damages.

This product is intended for *in vitro* research only.

revised on January 16, 2025

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