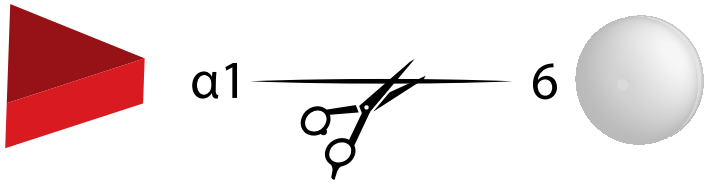

α-(1-6) Fucosidase

α-L-Fucoside fucohydralase

Source

recombinant *Elizabethkingia miricola* in *E. Coli*

Catalog Number

E-F006	60 µl
E-F006-20	20 µl
E-F006-200	200 µl

EC

3.2.1.51

Recommended Reagents

included with E-F006:

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

Activity ≥ 1 U/ml

Specific Activity ≥1.5 U/mg

Molecular Weight ~50,000 daltons

Specific Activity

One unit of QA-Bio α-(1-6) Fucosidase is defined as the amount of enzyme required to produce 1 µmole of methylumbelliferone in 1 minute at 37°C, pH 5.0 from 4-methylumbelliferyl-α-L-fucopyranoside.

Formulation

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

Storage

Store enzyme at 4°C. Do not freeze.

Specificity

α(1-6) linked core fucose when covalently attached to a reporter molecule at the reducing terminus. The one exception is that a terminal unbranched α(1-3)) or α(1-4) fucose is cleaved in the absence of any reporter molecule. These substrates do not apparently occur in nature.

Reporter molecules known to support cleavage are amino-napthalene disulfonic and trisulfonic acids and 2-aminobenzoic acid(2-AA). However, 2-aminobenzamide(2-AB) will not support cleavage. Shorter oligosaccharides such as trimannosylchitobiose are more completely digested than longer derivatives which may require longer incubation times.

Stability

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

Purity

QA-Bio α-(1-6) 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-(1-6) Fucosidase

Specifications - Protocol

QA-Bio
www.QA-Bio.com
info@QA-Bio.com

phone (Asia) +65 3158 9855
phone (Europe) +48 22 104 0892
phone (USA) +1 760 249 2664

Directions for use

1. Add up to 1 nmol of labeled 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-(1-6) Fucosidase.

5. Incubate 3 hours at 37°C.

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

QA-Bio
www.QA-Bio.com
info@QA-Bio.com

phone (Asia) +65 3158 9855
phone (Europe) +48 22 104 0892
phone (USA) +1 760 249 2664