

CERTIFICATE OF ANALYSIS

PRODUCT NAME: Cytochrome c Digest (lyophilized)

PRODUCT NUMBER: NCI161089

LOT NUMBER: *****

EXPIRATION DATE: *****

1. Product description

The vial contains a lyophilized cytochrome c digest. The digestion was performed with trypsin.

Protein	Source of protein	Molecular weight (kDa)
Cytochrome c.....	Cow	 11.5

Sample quantity: 1.6 nmol/vial

2. Procedure

1. Reconstitute the lyophilized sample in 200 µL 95% water, 5% ACN with 0.05% TFA to obtain a concentration of 8 pmol/µL.
2. Vortex and wait (at least) 10 min before making the dilution, to allow reconstitution of all peptides.

Store vials containing the sample at -18°C.

3. Dilution

Nano LC: Dilute the sample to 1 pmol/µL in water with 0.05% TFA . ¹⁾

Capillary LC: Use the sample as described under Procedure 2.1. (no further dilution)

¹⁾ It is recommended to use glass sample vials or inserts for sample dilution. The polypropylene vial with glass insert, 250 µL, P/N 163974 is appropriate.

The use of polypropylene sample vials may lead to adsorption of hydrophobic compounds at low sample concentration.

This product ("Product") is warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation") and to be free from defects in material and workmanship. Unless otherwise expressly authorized in writing, Products are supplied for research use only. No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the original purchaser of the Product ("Buyer").

No other warranties, express or implied, are granted, including without limitation, implied warranties of merchantability, fitness for any particular purpose, or non infringement. Buyer's exclusive remedy for non-conforming Products during the warranty period is limited to replacement of or refund for the non-conforming Product(s). There is no obligation to replace Products as the result of (i) accident, disaster or event of force majeure, (ii) misuse, fault or negligence of or by Buyer, (iii) use of the Products in a manner for which they were not designed, or (iv) improper storage and handling of the Products.

Pierce Biotechnology
3747 N. Meridian Road

PO Box 117
Rockford, IL 61105
USA

(800) 874-3723
(815) 968-0747

(815) 968-7316 fax
www.thermo.com/pierce

Test Certificate

Test chromatogram

Intensity (counts)

Insert Graph

Batch number *****

Expiry date: *****

Time (min)

Figure 1. Total Ion Chromatogram cytochrome c digest, 1 pmol

LC-MS Conditions

HPLC System:	Thermo Scientific™ Dionex™ UltiMate™ 3000 RSLCnano
MS:	Thermo Scientific™ Orbitrap™ XL
Column:	Thermo Scientific™ EASY-Spray™ column, ES800A
Mobile Phase A:	Water, 0.1% FA
Mobile Phase B:	Acetonitrile, 0.1% FA
Gradient:	3–44% B in 30 min
Flow Rate:	300 nL/min
Column Temp.:	35 °C
Sample:	Cytochrome c digest
Sample Concentration:	1 pmol/μL
Inj. Volume:	1 μL

Selection of peptides

Peak	Retention Time (min)	Sequence	Exper. Mass (MH ⁺)	Theor. Mass (monoisotopic)
0	***	Ac-GDVEK	589.28(+1)	588.3
1	***	KYIPGTK	403.74(+2)	805.5
2	***	YIPGTK	678.38(+1)	677.4
3	***	IFVQK	634.39(+1)	633.4
4	***	KTGQAPGFSYTDANK	528.93(+3)	1583.8
5	***	TGQAPGFSYTDANK	728.84(+2)	1455.7
6	***	GEREDLIAYLKK	478.94(+3)	1433.8
7	***	TGPNLHGLFGR	390.21(+3)	1167.6
8	***	MIFAGIK	390.23(+2)	778.4
9	***	EDLIAYLK	482.75(+2)	963.5
10	***	IFVQKCAQCHTVEK	545.27(+3)	1632.8
11*	***	GITWGEETLMEYLENPKK	713.35(+3)	2137.0
12*	***	GITWGEETLMEYLENPK	670.66(+3)	2008.9

*Peptides 11 and 12 may be very low in signal intensity or undetectable at low concentrations due to adsorption to the vial surface.

This product ("Product") is warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation") and to be free from defects in material and workmanship. Unless otherwise expressly authorized in writing, Products are supplied for research use only. No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the original purchaser of the Product ("Buyer").

No other warranties, express or implied, are granted, including without limitation, implied warranties of merchantability, fitness for any particular purpose, or non infringement. Buyer's exclusive remedy for non-conforming Products during the warranty period is limited to replacement of or refund for the non-conforming Product(s). There is no obligation to replace Products as the result of (i) accident, disaster or event of force majeure, (ii) misuse, fault or negligence of or by Buyer, (iii) use of the Products in a manner for which they were not designed, or (iv) improper storage and handling of the Products.

Pierce Biotechnology
3747 N. Meridian Road

PO Box 117
Rockford, IL 61105
USA

(800) 874-3723
(815) 968-0747

(815) 968-7316 fax
www.thermo.com/pierce