

Rapid PNGase F

COMPLETE DEGLYCOSYLATION IN MINUTES

Update
2015/16

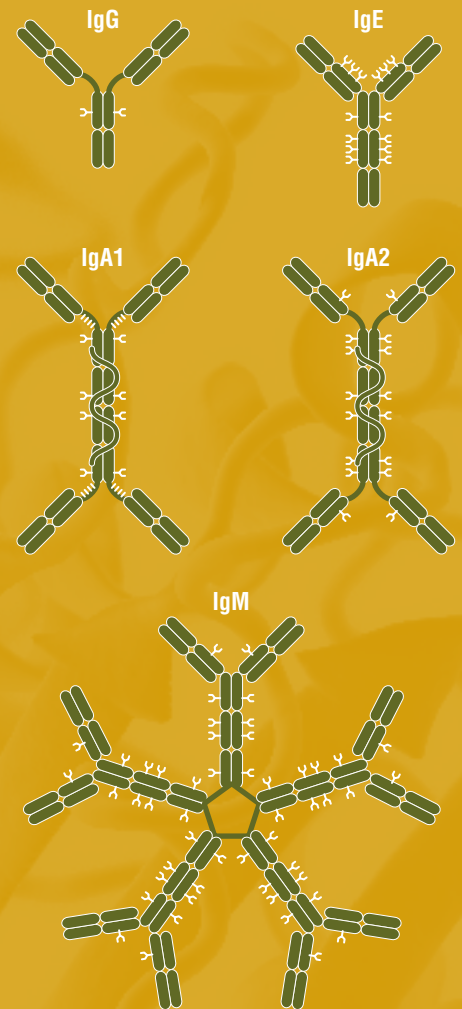


Is antibody deglycosylation slowing down your workflow?

Rapid PNGase F is an improved reagent for the deglycosylation of different isotypes (classes) of antibodies and antibody-fusion proteins. It allows for complete and rapid deglycosylation in minutes. All *N*-glycans are released, without bias, and ready to be prepared for downstream chromatography or mass spectrometry analysis.

Benefits

- Speed up your deglycosylation with our one-step reaction setup
- Release all *N*-glycans without bias
- Achieve sensitive and reproducible results with short reaction times
- Move directly and rapidly to downstream chromatography or mass spectrometry analysis
- Highly purified, recombinant protein with a long shelf life, reducing lot-to-lot variability



With Rapid PNGase F, you can achieve complete deglycosylation in minutes

Standard Workflow

Denaturation
(OTT, Heat)
15–45 min.

Alkylation
30 min.

PNGase F
Digestion
2–16 hr.



~3–17 hr.

Rapid Workflow

Rapid
PNGase F
Digestion
5 min.



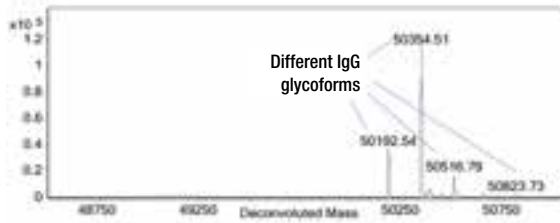
5 min.

Y *N*-glycan
I *O*-glycan

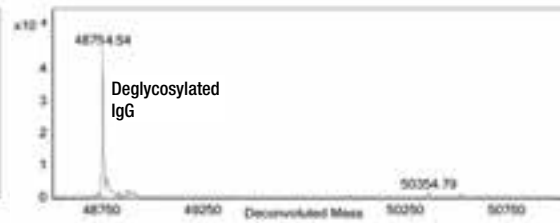
Achieve complete deglycosylation in less than 10 minutes.

Rapid PNGase F results in complete deglycosylation with a short incubation

Control (Untreated IgG)

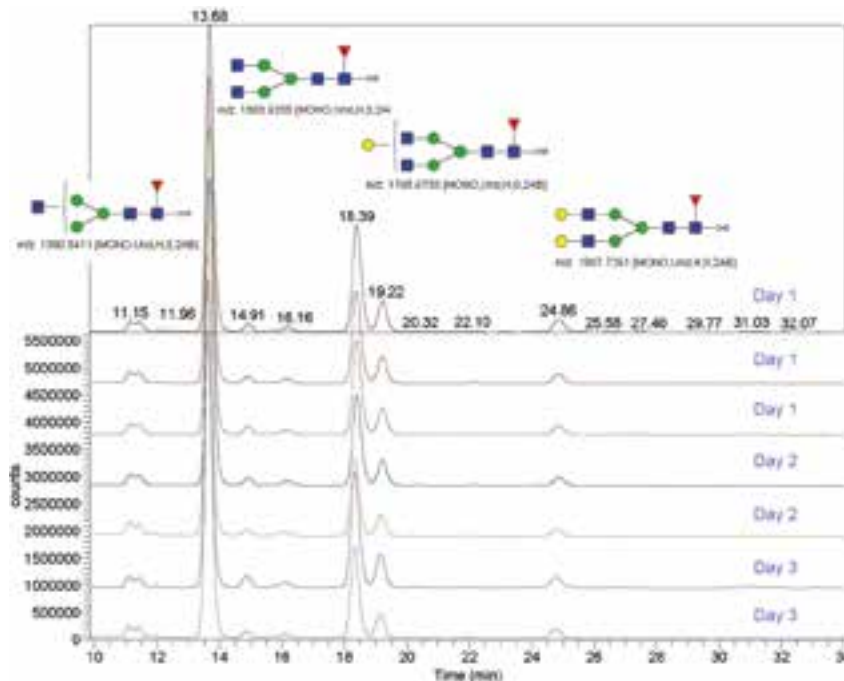


Rapid PNGase F (5 min. at 50°C)



Incomplete PNGase F digestions are a concern because some N-glycans may be removed faster than others, resulting in a biased analytical composition. A monoclonal murine antibody was incubated for 5 min. with Rapid PNGase F, demonstrating that a short incubation is sufficient to deglycosylate every N-glycan site without bias.

Rapid PNGase F delivers a highly reproducible glycan profile, even for low abundance species

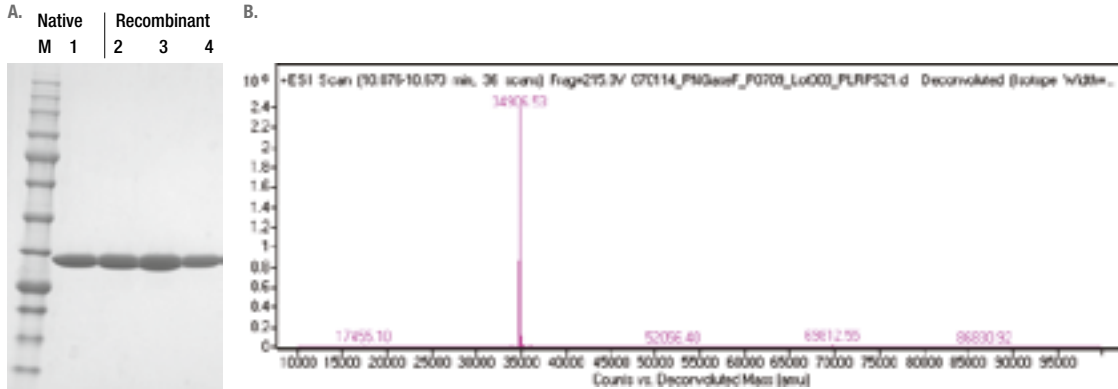


Rituximab samples (80 µg) were treated for 5 min. with Rapid PNGase F. Released N-glycans were labeled with 2AB and analyzed by LC-MS. Results show seven replicates from 3 different days, by different operators. The glycan profile is highly reproducible, even for low abundance species.

For more information, visit www.NEBGlycosidase.com

of antibodies and glycoproteins

All PNGase F products from NEB are highly pure for reproducible results



A) SDS-PAGE analysis of PNGase F (Glycerol-free). M: Unstained Protein Marker, Broad Range (2–212 kDa). Lane 1: Native PNGase F (NEB #P0704), Lot 41. Lane 2-4: Recombinant PNGase F (NEB #P0708), Lot 2, 3, 4

B) Intact MS analysis of PNGase F (Glycerol-free), Recombinant (NEB #P0709). MW: 34,906.53 Daltons. Mass determination by an Agilent® 6210 TOF LC/MS.



Not sure which PNGase F product will work best for you?

NEB offers a selection of PNGase F products, all of which are highly pure for reproducible results. The selection chart below shows recommendations for different applications.

	RAPID PNGase F	PNGase F	PNGase F (GLYCEROL-FREE)	REMOVE-IT® PNGase F	RECOMBINANT PNGase F	RECOMBINANT PNGase F (GLYCEROL-FREE)
N-glycan removal from glycoproteins		•	•	•	•	•
Optional removal of the enzyme from the reaction				•		
Glycoprotein analysis, regulatory monitoring	•*				•	•
High-throughput antibody analysis, regulatory monitoring	•					
Glycomics	•	•	•	•	•	•
Proteomics	•		•	•		•

* Rapid PNGase F works for many other glycoproteins (not antibody-related), but this needs to be empirically tested for each glycoprotein.



Did you know that many of these products can be purchased in larger volumes? Contact bulks.de@neb.com to find out more.

Antibody analysis made simple with Rapid PNGase F.



Quality
control



Regulatory
monitoring



**THERAPEUTIC
ANTIBODIES**



Glycoform
profiling

Save time during regulatory monitoring and
quality control with precise glycoform profiling

Choose from our selection of PNGase F products

For your deglycosylation application.

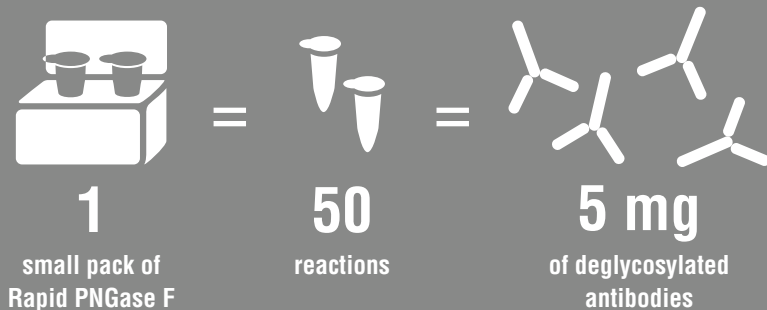
PRODUCT	NEB #	SIZE
Rapid PNGase F	P0710S	50 reactions
PNGase F	P0704S/L	15,000/75,000 units
PNGase F (Glycerol-Free)	P0705S/L	15,000/75,000 units
Remove-iT PNGase F	P0706S/L	6,750/33,750 units
PNGase F, Recombinant	P0708S/L	15,000/75,000 units
PNGase F (Glycerol-Free), Recombinant	P0709S/L	15,000/75,000 units

NEW ENGLAND BIOLABS®, NEB®, NEBSOLUTIONS® and REMOVE-IT® are registered trademarks of New England Biolabs, Inc.
AGILENT® is a registered trademark of Agilent, Inc.



PNGaseF_TR1 – Version 1.0 – 7/15

What do you get with Rapid PNGase F?



For more information, visit www.neb.com/p0710

Germany & Austria

New England Biolabs GmbH
Brüningstr. 50, Geb B852
65926 Frankfurt/Main, Germany
Tel: +49/(0)69/305-23140
Fax: +49/(0)69/305-23149

Free Call: 0800/246 5227 (Germany)
Free Call: 00800/246 52277 (Austria)
info.de@neb.com
www.neb-online.de

USA

New England Biolabs, Inc.
Telephone (978) 927-5054
Toll Free (USA Orders) 1-800-632-5227
Toll Free (USA Tech) 1-800-632-7799
Fax (978) 921-1350
info@neb.com
www.neb.com

Canada

New England Biolabs, Ltd.
Toll Free: 1-800-387-1095
info.ca@neb.com

China, People's Republic

New England Biolabs (Beijing), Ltd.
Telephone: 010-82378265/82378266
info@neb-china.com

France

New England Biolabs France
Telephone : 0800 100 632
info.fr@neb.com

Japan

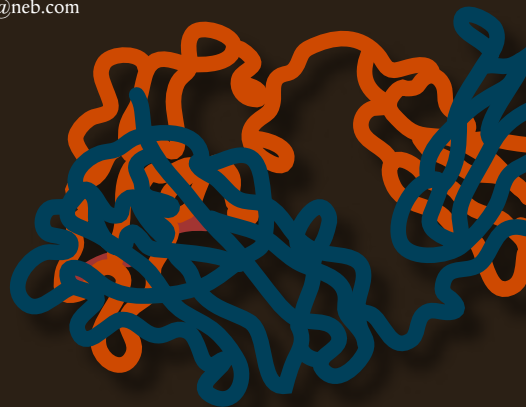
New England Biolabs Japan, Inc.
Telephone: +81 (0)3 5669 6191
info@neb-japan.com

Singapore

New England Biolabs, PTE. Ltd.
Telephone +65 6776 0903
sales.sg@neb.com

United Kingdom

New England Biolabs (UK), Ltd.
Call Free: 0800 318486
info.uk@neb.com



www.neb-online.de