Certificate of analysis

Product Name/Description:	α2,3-Sialidase		
Cat. #:	4455		
Lot #:	Specified on product label		
Storage Conditions:	4 degrees C		
Expiration Date:	Specified on product label or package		
Package Size:	5 U		
Package Contents:	1. α2,3-Sialidase	50 U/ml	5 U
Source:	Escherichia coli carrying a plasmid encoding $\alpha 2$, 3-sialidase from Salmonella typhymurium LT2		
Unit Definition:	One unit of the enzyme is defined as the amount that produces 1 μ mol of PA-lactose from PA-3'-sialyllactose in a minute at 37°C (pH 5.5).		
Quality Control Data:	Protease contamination test: No protease activity was detected in this enzyme when 0.5 U of this enzyme was incubated with 4 nmol of oxidized insulin B chain and analyzed by HPLC.		
	Exoglycosidase and endoglycosidase contamination test: No β -galactosidase, α -mannosidase, α -fucosidase and endo- β -N-acetylglucosaminidase activities were detected in this enzyme when 250 mU of this enzyme was incubated with 20 pmol of each of several kinds of pyridylamino oligosaccharides and analyzed by HPLC.		

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department of Takara Bio Inc.

4455 Page 1 of 2

v202309w

Notice To Purchaser:

Please refer to the website.

Product Documents, Patent Markings, Trademarks, & Safety Information:

Refer to website for availability to download or contact your local office: www.takara-bio.co.jp (Japanese) www.takarabio.com (English)

Licence Statements:

Please visit our website and click the "license" button on the product's web page.

©2019 Takara Bio Inc. All Rights Reserved.

All trademarks are the property of Takara Bio Inc. or its affiliate(s) in the U.S. and/or other countries or their respective owners. Certain trademarks may not be registered in all jurisdictions.

4455 Page 2 of 2

v202309w