

Certificate of Analysis

Product Description:	MS2 Bacteriophage – Low
Catalog Number:	0810052
Target Titer:	1.0 x 10⁹ pfu/ml*
Volume:	0.1 mL
Lot Number:	324155
Expiration Date:	2022/03/30
Storage Temperature:	-20°C or below

Use Universal Precautions!

CAUTION: This product is not subject to infectious substance shipping regulations. However, this material should be handled as if capable of transmitting infectious agents. Avoid freeze thaws; this may negatively impact the product's performance.

ANALYSIS: MS2, an *Escherichia coli* single stranded RNA bacteriophage, was propagated in *E. coli*, using standard microbiological techniques and media. The MS2 Bacteriophage is supplied in SM buffer. The preparation may contain some *E. coli* nucleic acids. The copy number of the MS2 genome will vary from preparation to preparation. This variation results from incomplete bacteriophage coat assembly, incorrectly assembled bacteriophage, and/or free floating nucleic acids.

***TARGET TITER:** Each lot of MS2 is adjusted to a target titer in plaque forming units/ mL (pfu/mL) and frozen. A representative frozen aliquot was titered using a standard plaque-forming unit assay. The titer may vary \pm 40% from lot to lot and will be altered by a single freeze-thaw.

CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.

These products are intended for research, product development and quality assurance use only. These products are NOT intended for use in the manufacturing or processing of injectable products subject to licensure under section 351 of the Public Health Service Act or for any other product intended for administration to humans.

Statement of Conformance:

The results reported in this Certificate of Analysis have been certified by ZeptoMetrix's Quality Assurance department as accurately reflecting the data contained in the batch production and testing records.

Date: April 15, 2020

Ref No.: ADV-20-06

Subject: Product Change Notification

Affected Products:

Catalog Number	Description
0810052	MS2 bacteriophage

Description/Reason for change:

ZeptoMetrix has been informed by the supplier that the clear vial cap used for this product is currently unavailable with no estimated date of when it may be back in stock. Therefore, until further notice, we are switching to a blue colored cap of the same composition supplied by the same manufacturer. There will be no change to the vial. This is a necessary change to ensure uninterrupted supply of this product.

Impact:

There is no impact on the quality or performance of the products.

Implementation:

Change will be implemented immediately.

End date: When a permanent replacement is made or original cap becomes available.

For questions about this change notice, contact us at (800) 274-5487 or by email at custserv@zeptometrix.com.

Best Regards,
ZeptoMetrix Corporation

A handwritten signature in blue ink, appearing to read 'Diane Waterman', with a long horizontal flourish extending to the right.

Diane Waterman
Director, Quality Assurance & Regulatory Affairs