Thermo Fisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane	
Fair Lawn, NJ 07410	There a Fisher Crientific's Quelity Queters have been found to perform to Quelity Management Queters
201.796.7100 tel	Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
201.796.1329 fax	Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	J22655	Quality Test / Release Date	06/27/2019	
Lot Number	190735			
Description	BETA-NADP MONOSODIUM TETRAHYDRATE			
Country of Origin	Japan	Suggested Retest Date	Jun/2021	
Chemical Origin	Synthetic by means of in vitro enzymatic			
BSE/TSE Comment	There is no concern/risk of BSE/TSE. It does not contain any ingredient derived from animal origins in final product form. Materials are handled and stored in a manner to prevent degradation, contamination and cross-contamination.			
Chemical Comment				

N/A					
Result Name	Units	Specifications	Test Value		
APPEARANCE		REPORT	White powder		
SODIUM (Na)	%	Inclusive Between 1.5 - 4.5	2.9		
RATIO ABS. 340/260 AFTER REDUCTION WITH G6PDH		Inclusive Between 0.41 - 0.45	0.43		
RATIO ABS. 280/260		Inclusive Between 0.19 - 0.23	0.21		
RATIO ABS. 260/340 AFTER REDUCTION WITH G6PDH		Inclusive Between 2.22 - 2.44	2.33		
ASSAY (ENZYMATIC ABS 340 pH 7.5)	%	>= 93	98.7		
MOISTURE	%	<= 8	3.5		
EXTINCTION COEF. (340 nm pH 7.5)		Inclusive Between 5800 - 6600	6100		
EXTINCTION COEF. (260 nm pH 7.5)		Inclusive Between 17200 - 18800	17400		
RATIO ABS. 250/260		Inclusive Between 0.8 - 0.86	0.83		

Derisa Bailing- Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above. If there are any questions with this certificate, please call at (800) 227-6701. *Based on suggested storage condition.