

## Page 1 of 1

## Certificate of Analysis

1 Reagent Lane Fair Lawn. NJ 07410	
201.796.7100 tel	ThermoFisher Scientific's Standard ISO900
201.796.1329 fax	Stanuaru 150900

ThermoFisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

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. ThermoFisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing.ThermoFisher does not maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	J22655	Quality Test / Release Date	02/13/2018		
Lot Number	181141				
Description	BETA-NADP MONOSODIUM TETRAHYDRATE				
Country of Origin	Japan	Suggested Retest Date	Feb/2020		
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					

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE POWDER
ASSAY (ENZYMATIC ABS 340 pH 7.5)	%	>= 93	100
EXTINCTION COEF. (260 nm pH 7.5)		Inclusive Between 17200 - 18800	1.74E04
EXTINCTION COEF. (340 nm pH 7.5)		Inclusive Between 5800 - 6600	6.20E03
MOISTURE	%	<= 8	3.0
SODIUM (Na)	%	Inclusive Between 1.5 - 4.5	2.8
RATIO ABS. 260/340 AFTER REDUCTION WITH G6PDH		Inclusive Between 2.22 - 2.44	2.33
RATIO ABS. 280/260		Inclusive Between 0.19 - 0.23	0.21
RATIO ABS. 340/260 AFTER REDUCTION WITH G6PDH		Inclusive Between 0.41 - 0.45	0.43
RATIO ABS. 250/260		Inclusive Between 0.8 - 0.86	0.83

Derisa Bailing- Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn