ORIENTAL YEAST CO.,LTD.

BIOSCIENCE DIVISION

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ASSAY DATA

β-NAD^+-S

β-Nicotinamide-adenine dinucleotide, oxidized form

(β-NAD^+, β-DPN^+, Coenzyme I)

Formula : $C_{21}H_{27}N_7O_{14}P_2$
Formula weight : 663.4 (as anhydrous free acid)
: 681.4 (as monohydrate)

Lot No. 20101209

	Specification	Result
Purity	≧95%	99.9 %
NAD^+ contents	—	92.5 %
Water contents	—	8.0 %
Contaminants		
1. Ethanol contents	—	n.d(<0.02%)
Methanol	—	n.d(<0.02%)
Acetone	—	n.d(<0.02%)
2. Heavy metal (as Pb)	≦ 10 ppm	< 2 ppm
3. Arsenite (As)	≦ 1 ppm	< 0.05 ppm
4. Microorganisms		
a) Standard plate assay	≦ 10^2CFU/g powder	0 CFU/g powder
b) Coliform	Negative	Negative
c) *Staph.aureus*	Negative	Negative
d) Yeast and fungus	≦ 10^2CFU/g powder	0 CFU/g powder
e) Thermo-tolerant spore	≦ 10^2CFU/g powder	0 CFU/g powder

Date of assay: December 09, 2010 Michiko. U.

Approved: M. Kagei Shipment : Conformable

Other details of the assay procedure are available upon request.