

瑞吉明 (山东) 生物科技有限公司

RuiJiMing (Shandong) Biotechnology Co.,Ltd.

分析报告

Certificate of Analysis

记录编号: QC-SOP-FP-021-R02-CE

版本号: V00

产品名称 Product Name	多(聚)核苷酸(PN) Polynucleotide(PN)	型号 Model	RJMPN-CE
INCI 名称 INCI Name	DNA 钠 SODIUM DNA	级别 Grade	化妆品级 Cosmetic grade
取材 Materials	雄性鲑鱼 (三文鱼) Male Salmon	批号 Batch No.	
生产日期 Manufacture Date		复验日期 Retest Date	
检验日期 Test Date		报告日期 Report Date	
检验依据 Testing Standard	《多(聚)核苷酸(PN)质量标准 V01 版》 Polynucleotide(PN) quality standard V01 version		

检验项目 TEST ITEMS	标准规定 STANDARD CODE	检验结果 RESULTS
外观 Appearance	白色, 类白色或淡黄色粉末或纤维状固体 White, white-like or yellowish powder or fibrous solid	
溶解度 Solubility	微溶于水 Slightly soluble in water	
鉴别 Identification	260nm 与 280nm 处吸光度的比值 1.5-2.0 UV:Ratio of absorbance at 260 and 280nm 1.5-2.0	
pH 值 (0.1%水溶液) pH value(0.1% aqueous solution)	5.0-9.0	
干燥失重 Loss on drying	≤20.0%	
含量 (按干燥品计) Assay (dry goods)	≥90.0%	
平均分子量 Average molecular weight	≥1000KD	
铅 Lead	≤10mg/kg	
镉 Cadmium	≤5mg/kg	
砷 Arsenic	≤2mg/kg	
汞 Mercury	≤1mg/kg	
菌落总数 Aerobic bacterial count	≤1000CFU/g	
霉菌和酵母菌总数 Molds and Yeast count	≤100CFU/g	
耐热大肠菌群 Thermotolerant coliform bacteria	不得检出/g Negative/g	
金黄色葡萄球菌 Staphylococcus aureus	不得检出/g Negative/g	
铜绿假单胞菌 Pseudomonas aeruginosa	不得检出/g Negative/g	
结论 Conclusion	本品按《多(聚)核苷酸(PN)质量标准 V01 版》检验, 结果符合规定。 The product was tested according to <i>Polynucleotide(PN) quality standard V01 version</i> , and the results were in conformity with the regulations.	

报告人 Reported by:

复核人 Checked by:

批准人 Approved by:

Polynucleotide (PN)

Chemicals Technical Data Sheet (TDS)

1、Manufacturer information	
Corporation name	Ruijiming (Shandong) Biotechnology Co., LTD
Address	Building 10,Shandong International Biotechnology Park,High-tech Zone,YanTaiCity,Shandong Province,China
2、Product Information	
Product model	RJMPN-CE
INCI name	SODIUM DNA
content	≥90.0%
3、Physical and chemical properties	
Appearance	White, like white or light yellow powder or fibrous solid
Smell	Having a characteristic smell or tastelessness
Solubility	Slightly soluble in water
4、Product application	
The main application	Cosmetics,medical beauty products
Mechanism	The mechanism of PN is to bind to adenosine A2A receptor, activate skin regeneration, promote the release of epidermal cell growth factor (EGF) and vascular endothelial cytokine (VEGF), and accelerate wound repair and healing. Inhibit the secretion of proinflammatory cytokines and have anti-inflammatory effects.
Main functions	Stimulate collagen and elastic fiber regeneration, repair damaged cells, promote skin regeneration, it can change the internal environment of human skin, and effectively eliminate the root cause of inflammation, continue to play an anti-inflammatory repair role; Helps form a three-dimensional moisturizing net on the skin, continuously releases the continuous moisturizing force, but also has the ability to reduce the damage of ultraviolet rays on the skin , repair acne, improve skin dullness.
Recommended addition	0.01%-1.5%
5、Packaging and storage	
Packaging	Solids: 20g/ bottle or 50g/ bottle; Or according to customer needs
Cosmetic expiration date and storage	Expiration date: 2 years Storage: cool place, sealed away from light, away from heat and fire.
6、Others	
Compatibility attention	1) This product is not resistant to strong acid, strong base and strong oxidant, and the main component of the preservative alcohol can be compatible, if the alcohol is added within the national standard, there will be no precipitation. If the alcohol exceeds the standard seriously, it may precipitate; 2) The solid powder is difficult to dissolve in the normal saline solution, and the product should be mixed with other materials after being dissolved separately.

Material Safety Data Sheet (MSDS)

1. Chemical and enterprise identification

Product name	Polynucleotide (PN)
Product model	RJMPN-CE
Company name	Ruijiming (Shandong)Biotechnology Co., LTD
Address	Building 10,Shandong International Biotechnology Park,High-tech Zone, YanTai City,Shandong Province,China
Composition	SODIUM DNA

2. Overview of hazard

Hazard category	This product is nucleic acid product, used for cosmetics production.
Invasion route	Ingestion、Inhalation
Health hazard	Reasonable use does not pose a health hazard.
Environmental hazard	No environmental hazards.
Combustion hazard	This product is not flammable and explosive.

3. First aid measures

Skin contact	Normal contact with no harm, if allergic reaction, wash with soapy water or water.
Eye contact	If you feel uncomfortable, lift your eyelids and rinse with water or saline.
Inhalation	If inhaled, if you feel unwell, seek medical advice immediately.
Ingestion	In case of accidental ingestion, rinse your mouth with plenty of water. If you feel unwell, seek medical advice immediately.

4. Fire protection measures

Hazardous characteristics	This product belongs to nucleic acid, no dangerous characteristics.
Hazardous Combustion Products	Nothingness
Method of extinguishing	Use water mist, sand, dry powder or carbon dioxide extinguisher to extinguish fire.

5. Emergency handling of leakage

Emergency Treatment	Small leaks: Wipe with a dry cloth or paper towel and clean the leak with water. Massive leakage: collect the leakage as much as possible, transport it to the waste disposal site with plastic buckets for disposal, and clean the leakage site with water.
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6. Operation, disposal and storage

Precautions for operation and disposal	To avoid damage to the packaging and storage containers, please unload them lightly during handling. Prohibit eating and drinking in the workplace. Keep away from heat source and fire. No smoking in workplace. Equipped with emergency leak handling equipment and corresponding number of fire extinguishers.
Safe storage conditions	Store in cool and ventilated place, keep container tightly closed. The packages should be arranged neatly. It should be stored separately from oxidizer and edible chemicals. The storage area shall be equipped with leakage emergency treatment equipment and suitable storage materials.

7. Contact control/personal protection

Engineering control	Work place should be separated from other work place, strengthen ventilation. Set up emergency evacuation channel and necessary danger escape area. Provide safe shower and eye wash equipment
Respiratory protection	Wear a suitable protective mask
Eye protection	Wear protective glasses
Body protection	Wear protective clothes
Hand protection	Wear rubber gloves
Other safety protection	Smoking, eating and drinking are prohibited in the workplace

8. Physical and chemical properties

Appearance and character	White, like white or light yellow powder or fibrous solid
Solubility	Slightly soluble in water
PH (0.1%Aqueoussolution)	5.0-9.0
Molecular weight	≥1000KD
PN Content	≥90.0%
Drying loss	≤20.0%

9. Stability and reactivity

Stability	stabilize
Contraindicated compound	Strong acid, strong base, strong oxidizer
Avoid contact conditions	High heat, open fire, humidity
Polymer	No information
Decomposition product	No information

10. Toxicological information

Acute toxicity	According to the data, the LD ₅₀ of rats by oral route is ≥5000 mg/kg, which indicates that the product is nontoxic.
Chronic toxicity	No information
Carcinogenicity	No information

Teratogenicity	No information
Mutagenicity	No information
Irritability	No skin irritation, no acute eye irritation
Sensitization	No skin sensitization

11. Ecological information

Ecotoxicological toxicity	No information
Potential for bioaccumulation	No information
Biodegradability and non-biodegradability	No information

12. Waste disposal

Precautions for Abandonment	Refer to relevant national and local regulations before disposal
Waste disposal method	It is recommended to dilute with a large amount of water and then enter the pollution treatment station for further disposal

13. Shipping information

United Nations Dangerous Goods Code	No information
HS CODE	No information
Packing mark	No information
Categories of packing	No information
Packaging code number	No information
The rules page of IMDG	No information
Transportation Precautions	The product in the process of transportation, to maintain the sealing of the product, to avoid product leakage, transportation process to maintain low temperature cold chain transportation, transportation should avoid high temperature exposure, avoid violent collision.

14. Regulatory information

Regulations on the Safety Management of Dangerous Chemicals. Detailed rules for the implementation of the Regulations on the Safety Management of Chemical Hazardous Substances. Regulations for safe use of chemicals in the workplace.

15. Other information

Nothingness

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RuiJiMing (Shandong) Biotechnology Co.,Ltd.

产品规格书

SPECIFICATION

产品名称 Product Name	多（聚）核苷酸（PN） Polynucleotide（PN）	级别 Grade	化妆品级 Cosmetic grade
INCI名称 INCI Name	DNA 钠 SODIUM DNA	文件编号 Document No.	SPE-RJMPN-CE
标准依据 Based on the standard	《多（聚）核苷酸（PN）质量标准 V01 版》 Polynucleotide（PN）quality standard V01 version	版本 Version	V01
		颁发部门 Issuing Department	质量部 Quality department
		生效日期 Effective Date	2024.03.16

项目 Items	标准 Standard	方法 Methods
外观 Appearance	白色，类白色或淡黄色粉末或纤维状 固体 White, white-like or yellowish powder or fibrous solid	目测 Visual inspection
溶解度 Solubility	微溶于水 Slightly soluble in water	Ch.P
鉴别 Identification	紫外分光光度法 A260/A280 在 1.5~2.0 Ultraviolet spectrophotometry A260/A280 in 1.5~2.0	GB/T34796-2017 质检专用章
pH 值 (0.1%水溶液) pH value (0.1% aqueous solution)	5.0~9.0	Ch.P 0631
干燥失重 Loss on drying	≤20.0%	Ch.P 0831
含量（按干燥品计） Assay（dry goods）	≥90.0%	GB/T34796-2017
平均分子量 Average molecular weight	≥1000KD	Ch.P 0633

铅 Lead	$\leq 10\text{mg/kg}$	化妆品安全技术规范 Cosmetics Safety Technical Regulations
镉 Cadmium	$\leq 5\text{mg/kg}$	化妆品安全技术规范 Cosmetics Safety Technical Regulations
砷 Arsenic	$\leq 2\text{mg/kg}$	化妆品安全技术规范 Cosmetics Safety Technical Regulations
汞 Mercury	$\leq 1\text{mg/kg}$	化妆品安全技术规范 Cosmetics Safety Technical Regulations
菌落总数 Aerobic bacterial count	$\leq 1000\text{CFU/g}$	化妆品安全技术规范 Cosmetics Safety Technical Regulations
霉菌和酵母菌总数 Mold and Yeast Count	$\leq 100\text{CFU/g}$	化妆品安全技术规范 Cosmetics Safety Technical Regulations
耐热大肠菌群 Thermotolerant coliform	不得检出/g Negative/g	化妆品安全技术规范 Cosmetics Safety Technical Regulations
金黄色葡萄球菌 Staphylococcus aureus	不得检出/g Negative/g	化妆品安全技术规范 Cosmetics Safety Technical Regulations
铜绿假单胞菌 Pseudomonas aeruginosa	不得检出/g Negative/g	化妆品安全技术规范 Cosmetics Safety Technical Regulations

贮存条件：阴凉处、避光、密封保存。

Storage Conditions: Store in a shaded, light-protected, and airtight condition.

有效期：2年

Expiration Date: 2 years.

编制人 Reported by:

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