

## Charm-Protect™ 口腔（鼻腔）拭子 DNA 保存液说明书

用于在室温下口腔（鼻腔）拭子样品的收集、运输和储存

**For collection, transportation and storage of oral (nasal) swab DNA samples at room temperature**  
**室温保存**

### 产品组成规格及贮存

下表列出了口腔（鼻腔）拭子保存液的产品规格，收到产品后，在室温下存放。产品可用于 100 份、200 份或 1000 份口腔（鼻腔）拭子 DNA 样品收集和储存。

Product Cat.	OP-100	OP-500
储存样品	200 份	1000 份
口腔（鼻腔）拭子保存液	100 ML	500 ML

### 产品介绍（Product Description）

武汉昌美生物 Charm-Protect™ 口腔（鼻腔）拭子 DNA 保存液，能提供一种简单，安全，方便有效的口腔（鼻腔）拭子 DNA 样品保存，在室温下（15 °C – 25 °C）保存口腔（鼻腔）拭子 DNA 超过 1 年，为获得下游实验所需要的高质量 DNA 提供了可靠保障。

### 产品功能特点（Feature Highlights）

使用昌美生物口腔（鼻腔）拭子保存液，有以下特点和优势。

- 1) 操作使用简单，安全。
- 2) 口腔（鼻腔）拭子 DNA 样品在保存液存放，可在室温下贮存超过 1 年，为运输和存储提供方便，并减低其成本。
- 3) 其获得的 DNA 可用来完成各种基因检测及分析实验。如：qPCR、NGS、SNP 分析。

### 技术参数 (Technical Parameter)

- \* 每100ML 的口腔（鼻腔）拭子保存液大约可以保持 150 - 200 份拭子样品（根据不同厂家的拭子大小而变化）。
- \* 在室温下（15 °C – 25 °C）保存口腔（鼻腔）拭子完整的 gDNA 一年以上。
- \* 每份口腔（鼻腔）拭子可以获得0.5 µg- 5 µg 的 gDNA 产量(样品不同，DNA 产量有所不同)。
- \* A260/A280 值大于或等于 1.7 – 2.0。

### 其他需要的材料（Additional Materials Needed）

- 一只笔

- 1.5-2.0ml 的储存小管

## 一般注意事项 (General Precautions)

- This preservation solution is for research use only. All due care and attention should be exercised in the handling of the solution
- Please follow the manufacture recommended sample collection procedure for maximum DNA sample protection and personal safety.

## 准备工作 (Preparation Before Starting)

- Make sure no food particle or beverage in the mouth. Rinse mouth with pure water and wait for 30 minutes before collecting sample
- Label the storage tube with name and date.

## 口腔（鼻腔）拭子 DNA 收集及保存步骤 (Oral (Nasal) Swab Collecting and Preservation Procedure)

- (1) 注意：请严格按照所购拭子厂家推荐的步骤进行口腔（鼻腔）拭子样品的采集。
- (2) 在收集前 30 分钟，清水漱口，保持口腔清洁；
- (3) 用移液枪将 500 $\mu$ l 保存液转入到储存小管中。
- (4) 握住手柄轻轻将取样拭子插入鼻腔黏膜，口腔黏膜处。
- (5) 轻轻旋转取样拭子，然后慢慢取出。
- (6) 将提取出的样品放入储存小管内的保存液中，折断（剪断）手柄，随即密封起来即完成取样。

## DNA 的分离纯化和下游应用 (DNA Isolation and Downstream Application)

The saliva DNA sample stored in the preservation solution is compatible with most common DNA isolation methods. Charm Biotech's Just-a-Tube Swab Isolation kits provide easy and efficient procedure for maximum high-quality DNA isolation. The quality of purified DNA can be examined by gel electrophoresis. Quantity of purified DNA may be determined by UV spectrophotometer or fluorescent DNA assay. The expected yield is 0.5 – 5  $\mu$ g of DNA from a single swab. The actual yield of DNA will varied depending on individual donor status. Purified DNA is compatible with downstream DNA analysis, such as PCR, qPCR, NGS, southern blot, microarray studies.

### Swab DNA 纯化方法:

The methods for DNA purification from oral (nasal) swab stored in the Charm Biotech Oral (Nasal) Swab DNA preservation solution:

- (1) Just-a-Tube 口腔（鼻腔）拭子 DNA 提纯试剂盒。
- (2) Charm-Pure 口腔（鼻腔）拭子 DNA 提纯试剂盒。

## Troubleshooting

Problem	Cause	Solution
Low yield of product	Amount of collected cells was less than recommended. Poor quality of starting material	Be sure to follow the protocol for oral (nasal) swab collection and processing correctly.
Partial degradation	Sample is not mixed immediately and thoroughly with DNA Preservation Solution. Some dead oral (nasal) epithelial cells are already existed before collection	Be sure to put swab into preservation solution in short time (less than 5 minutes) and mixed immediately by inverting or shaking the storage tube more than 10 times. Use clean water to rinse oral or nasal cavities before collection to remove dead cells as much as possible