

NOYA-stable RNA

Catalog number: N-1231

« Research Use Only »

Description

Noya-Stable RNA is an aqueous, Non-toxic tissue and cell storage reagent that stabilizes and protects cellular RNA in intact unfrozen tissue and cell samples. **Noya-Stable RNA** eliminate the need to immediate process samples or to freeze samples in liquid nitrogen. **Noya-Stable RNA** preserve RNA in tissue for up to 1day at 37°C, 1 week at 25°C and 1 month at 4°C. Tissue can also be stored at -20°C long term.

Noya-Stable RNA has been extensively tested on several tissues from vertebrate species, including brain, heart, kidney, spleen, liver, and testis. **Noya-Stable RNA** is also effective for *E.coli*.

Storage and stability

Store Noya-stable at room temperature. In the case of precipitation, warm the solution to 37°C and shake to re-dissolve it.

Guideline for use

- Use Noya-Stable RNA **with fresh tissue only**. Do not freeze tissue before immersing in **Noya-Stable RNA**.
- Before immersion in **Noya-Stable RNA**, cut large tissue samples to 0.5cm in any single dimension.
- Place the fresh tissue in 5-10 volumes of **Noya-Stable RNA**.
- Most samples in **Noya-Stable RNA** can be stored at room temperature for 1 week without compromising RNA quality, or at -20°C or -80°C long term.

Storage of sample in Noya-Stable RNA

- 1- Storage at -80°C (recommended for long-term storage): incubate sample at 2-8°C overnight, then remove them from **Noya-Stable RNA** before storage at -80°C. For tissue culture, do not remove the **Noya-Stable RNA**, simply freeze the whole solution. The cell type that have been evaluated do not lyse when frozen at -80°C in **Noya-Stable RNA**. Sample can subsequently be thawed at room temperature without affecting the amount or the integrity of recoverable RNA.
- 2- Storage at -20°C (also an option for long term storage): Incubate sample at 2-8°C overnight then transfer to -20°C. Sample will not freeze at -20°C, but some crystal may be formed which will not affect subsequent RNA isolation. If crystal formation

is a concern, remove **Noya-Stable RNA** prior storing the sample at -20°C. Sample can subsequently be thawed at room temperature without affecting the amount or the integrity of recoverable RNA.

- 3- Storage at -2-8°C: sample can be stored for up to 1 month without any experimental evidence of RNA degradation.
- 4- Storage at ambient temperature (25°C); RNA isolated from samples when is store at 25°C for one week is intact. RNA from samples that is stored at 25°C for 2 weeks appears slightly degraded. If ambient temperature is above 25°C, incubate samples in **Noya-Stable RNA** on ice for a few hours, if possible, before storing at ambient temperature.
- 5- Storage at 37°C: RNA isolated from samples that is stored at 37°C is intact after 24h incubation, but is partially degraded after 3 days incubation.

Procedure

- Use **Noya-Stable RNA** with fresh tissue only. Do not freeze tissue before immersion in **Noya-Stable RNA**.
- Before immersion in **Noya-Stable RNA**, cut large tissue sample to 0.5 cm in any single dimension.
- Place the fresh tissue in 5-10 volume of **Noya-Stable RNA**.
- Most samples in **Noya-Stable RNA** can be stored at room temperature for 1 week without compromising RNA quality , or at -20°C or -80°C indefinitely.
- Do not freeze sample in **Noya-Stable RNA** immediately ;store at 4°C overnight (to allow **Noya-Stable RNA** to thoroughly penetrate the tissue), remove supernatant , then move to -20°C or -80°C for long term storage . For tissue culture cells, don't remove the **Noya-Stable RNA**, simply freeze the whole solution. Sample can be subsequently thawed at room temperature and refrozen without affecting the amount or the integrity of the recoverable RNA.
- Tissue Culture Cells: pellet cells according to standard laboratory protocols. Wash the cells with PBS or an equivalent buffer to remove culture media. After resuspending the cells, add 5-10 equivalent volume **Noya-Stable RNA** to the cell suspension. No further rinsing of the cell pellet is necessary.
- Anti-Coagulated Blood: gently invert collection tube several times to mix blood sample. Add 300-500µl of anticoagulated blood to 1.3ml of **Noya-Stable RNA**. Mix thoroughly. Sample can be stored in ambient temperature for up to 3 days and at -20°C for long term storage.

RNA Isolation from Material in Noya-Stable RNA

Tips

Glass fiber-based extraction:

- lysate from **Noya-Stable RNA** treated sample often require more force to pass through glass –fiber filter than lysate from untreated samples . Therefore, it may be necessary to use centrifugation instead of vacuum pressure to pass lysate through glass-fiber filter

One-step disruption /extraction solution:

- When using one-step RNA isolation product such as RNAsol, Trisol, ... on **Noya-Stable RNA**- preserved sample , the aqueous phase will occasionally appear cloudy. If this occurs, simply continue the procedure, following the technical bulletin or manufacturer's instructions. Cloudiness of the aqueous phase does not affect the quantity or quality of the RNA.
1. Tissues that have been stored **Noya-Stable RNA** should be removed from the storage solution with sterile forceps and submerged in RNA lysis solution. Tissue homogenization should be rapid once the tissue is in lysis /denaturation solution.

Note:

Tissue stored in **Noya-Stable RNA** develop a hard rubbery texture and may be more difficult to homogenize thoroughly than fresh tissue . Dicing the tissue into smaller pieces with a scalpel can expedite homogenization.

2. Cell stored in **Noya-Stable RNA** can either be removed by centrifugation or the RNA can be extracted from the mixture of cell and **Noya-Stable RNA**.

Notes

- **FOR RESEARCH USE ONLY NOT FOR HUMAN OR DIAGNOSTIC USE.**
- Please observe General laboratory precaution and utilize safety while using this reagent.

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