

Doctor Vida Customized LAMP Master MIX

Ref. 133001010





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OVERVIEW

The produtos Doctor Vida Customized LAMP Master Mix contains all components for sample preparation and LAMP reaction. LAMP primers, designed by the client, which are included in the product formulation, will have to be pre-ordered using the ref. 133001011.

APPLICATIONS

The product Doctor Vida Customized LAMP Master Mix is suitable to be used with extracted DNA or non-extracted samples from environment, plants, humans, and animals.

KIT CONTENTS

- 1. Ref. 133001010: Test tubes ready-to-use (include customer-specific primers, ref. 133001011): 20 reactions
- 2. Ref. 133001017: Lysis buffer, 6 mL

SHIPPING AND STORAGE

The product is shipped with cold packs and should be stored at recommended temperature. Check the expire date in the package.

PRODUCT USE LIMITATIONS

The product is intended for research use only. This product is not intended for the diagnosis, prevention, or treatment of a disease.

SAFETY INFORMATION

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the safety data sheet (SDSs) available online in convenient and compact PDF format at https://doctorvida.store/. STAB VIDA recommends to have available the contacts of medical emergency and poison center for all staff members.



EQUIPMENTS AND REAGENTS NOT PROVIDED WITH THE PRODUCT

- Pipets and pipet tips (aerosol resistant)
- Laboratory consumables
- Doctor Vida Pocket device (ref. 133001002) or Real-Time PCR equipment

PROTOCOL

1. Important points before starting

- Install Dr Vida mobile App from Google Play Store or App Store and search for "Dr Vida pocket PCR".
- > Set up your reaction protocol through the API server using the link https://api.live.pocket.doctorvida.com/customer/login and log in with App Dr Vida mobile App credentials. If needed, contact Doctor Vida support team for any questions regarding protocol set-up.
- Connect the Dr Vida pocket device to a power outlet using the provided power adapter.
- Open the Dr Vida App, go to devices menu () and connect with Dr Vida pocket device via Bluetooth.
- Note: If you are using a Real-Time PCR equipment instead of Doctor Vida pocket device, ignore the previous steps.

2. Sample preparation

2.1 Add the sample or extracted DNA to the lysis buffer provided. The volume of lysis buffer used to resuspend the sample should be optimized based on the sample type.

Sample preparation according to sample type:

Extracted DNA: Add $2\mu l$ of DNA sample with a concentration between $1 ng/\mu l$ and $20 ng/\mu l$ to the lysis buffer.

Solid samples: Solid samples, such as plant leaves, may need to be macerated in water before being added to the lysis buffer.

Swab samples: Collect the swab directly in a tube containing 200µL of Lysis buffer.



Important note 1: As a starting point, you can use 200 μL of lysis buffer to resuspend the sample.

Important note 2: The amount of sample to be added to the lysis buffer should be optimized.

Important note 3: Using different lysis buffers may cause the reaction to fail, as they might not be compatible with the Doctor Vida LAMP Master Mix.

If needed, contact Doctor Vida support team for any questions regarding sample preparation for your particular application.

2.2 Mix well the lysate (sample and lysis buffer) and incubate 10 - 30 minutes at room temperature before adding to LAMP reaction tube.

3. Perform LAMP reaction

Important note: Before performing the experiments with the desired samples, a non-template reaction (5 uL of lysis buffer without sample) and a positive control (e.g. positive DNA resuspended in Lysis buffer) reaction are recommended.

- 3.1 Defrost the test tube and allow it to reach the room temperature.
- 3.2 Add 5uL of lysate to the test tube. Incubate 5 minutes at room temperature.
- 3.3 Analyse the test tube (with the sample) in Doctor Vida pocket device, following the instructions in Doctor Vida mobile App.



TROUBLESHOOTING

This troubleshooting guide may be helpful in solving problems that may arise. For more information, contact Doctor Vida technical support. We are always happy to answer any questions you may have about either the information and protocols. Please see contacts in Manufacturing information section

| Problems | Suggestions |
|---------------------------|---|
| Low product yield or | |
| absence of product | |
| Low amount of starting | Perform the test with a known positive sample. |
| template | Optimize the amount of template and the amount of |
| | lysis buffer. |
| Primers don't match the | Review primer design. |
| target | |
| High amount of inhibitors | Dilute your sample in a higher volume of lysis buffer. The |
| | concentration of inhibitors will be lower in the LAMP |
| | reaction, which can lead to better results. |
| Unspecific reaction | |
| Low reaction temperature | Increase the reaction temperature. |
| Unspecific primers | Perform the negative-control (only Lysis buffer, without |
| | sample), if the result is positive review primer design. |
| Carry-over contamination | -Prepare new sample and/or new test tube. |
| | Avoid opening the LAMP reaction tube once the reaction |
| | is over. If this is mandatory, open the tubes in a separate |
| | area of the one used for reaction preparation. |
| | Make sure the environment and Doctor Vida pocket |
| | device is clean. |

MANUFACTURER INFORMATION

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Technical assistance:



In case of any problem, please contact us by email drvida@stabvida.com or phone 00351 938 437 766 (Call to national mobile network)

Monday to Friday from 8:30 am to 5:30 pm. (GMT time)