

<b>Catalog number</b>	C15018-1ML		
<b>Set package</b>	Cat.	Name	Amount
	C15018-1ML	2X Colorimetric RT-LAMP Master Mix	1 mL

**Description**

Croyez 2X Colorimetric RT-LAMP Master Mix is an optimized master mix for reverse-transcription loop-mediated isothermal amplification (RT-LAMP) reactions. This product is a dual enzyme system, providing a rapid and sensitive detection in one pot.

The amplified products can be visually observed by a metal indicator for calcium, hydroxynaphthol blue (HNB). Positive reactions will appear a color change from violet to sky blue, while negative reactions won't.

**Storage** Stored at -20°C. **Avoid repeated freeze/thaw cycles.**

The following procedure is a general guideline for RT-LAMP reaction. To maintain an RNase-free environment, always wear disposable gloves, and use laboratory consumables and water of nuclease-free grade during the whole experiment course. **RT-LAMP reaction set-up:**

- 10X LAMP primer mix

Component	10X concentration	Final concentration
<b>FIP</b>	16 $\mu$ M	1.6 $\mu$ M
<b>BIP</b>	16 $\mu$ M	1.6 $\mu$ M
<b>F3</b>	2 $\mu$ M	0.2 $\mu$ M
<b>B3</b>	2 $\mu$ M	0.2 $\mu$ M
<b>LOOP F</b>	8 $\mu$ M	0.8 $\mu$ M
<b>LOOP B</b>	8 $\mu$ M	0.8 $\mu$ M

**Manuel**

- An overview of the reaction set-up is listed in the table below. Place all required reagents **on ice**. Distribute appropriate volumes into each tube before adding template.

Component	Amount	Final concentration
<b>2X Colorimetric RT-LAMP Master Mix</b>	12.5 $\mu$ L	1X
<b>10X LAMP primer mix</b>	2.5 $\mu$ L	1X
<b>RNA template</b>	1-2 $\mu$ L	variable
<b>Nuclease-Free H<sub>2</sub>O</b>	X $\mu$ L	-
<b>Total reaction volume</b>	$\mu$ L	-

\* See Usage Notes for additional guidelines on primer/template preparation.

3. Add target RNA template to the detection tube. Gently mix the reaction thoroughly to achieve uniform distribution and avoid making bubbles.
4. Incubate at 65°C for 30-60 min.
5. After LAMP reaction complete, the enzyme can be inactivated by heating at 80°C for 10 min.

---

**Usage Notes*****Primer concentration***

Primer concentration can be titrated between 0.25X – 1X if undesired background signal appeared.

---

*For Research Use Only.*