

# HaoKebio™ Rapid RNA FISH Kit(Plant)

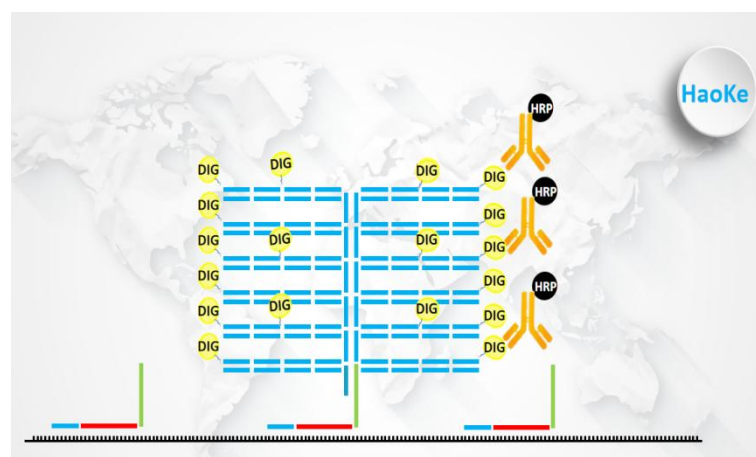
**Catalog Number:HKR11Z**

## 【Product Information】

| Product Name   | Catalog No | 30T   | Storage                         | Shelf Life |
|--|------------|-------|---------------------------------|------------|
| Wash Buffer (powder, dissolve in 10L ddH <sub>2</sub> O) | HKR11-1    | 10L   | Short-term:4℃<br>Long-term:-20℃ | 12 months  |
| AP-Mouse Anti-Digoxin (100x)                             | HKR11-2    | 30uL  |                                 |            |
| NBT Chromogen Solution A (20x)                           | HKR11-3    | 150uL |                                 |            |
| NBT Chromogen Solution B (20x)                           | HKR11-4    | 150uL |                                 |            |
| Blocking Buffer  | HKR11-5    | 3mL   |                                 |            |
| Probe:   | HKR11-6    | 3mL   |                                 |            |

## 【Product Description】

A rapid RNA hybridization kit designed for in situ hybridization of RNA longer than 300 bp. The kit features a simple and fast protocol, significantly reducing experimental time. It includes multiple trigger probes that, upon binding to the target sequence, expose an amplification sequence. This triggers the formation of a dendritic HCR (Hybridization Chain Reaction) assembly, generating a large nucleic acid polymer. Each nucleic acid strand is labeled with digoxigenin (DIG), which is detected by antibodies for chromogenic visualization.



## 【Probe Information】

## 【Tissue Fixation】

| Tissue Type | Animal                            | Plant  | Frozen Samples  | Cell Climb Slides | Cells   |
|-------------|-----------------------------------|--|---|-------------------|---|
| Treatment   | Fix at RT for 12h, paraffin embed | Vacuum fix for 1h, RT fix for 12h, paraffin embed. | Dehydrate in 15% sucrose at 4℃ for 8h, then in 30% sucrose at 4℃ for 8h, OCT embed. | Fix at 4℃ for 2h. | scrape off cells, fix in 4% PFA at 4℃ for 2h, wash with PBS, agarose embed. |
| Type        | mRNA                              | lncRNA   | circRNA   | miRNA             | rRNA  |
| Treatment   | Fix at RT for 12h                 | Fix at RT for 12h (<300bp: 24h)                    | Fix at RT for 12h   | Fix at RT for 12h | Fix at RT for 12h (<300bp: 24h)   |

## 【Storage and Shipping】

Ship on wet ice; store at -20℃ for long-term or at 4℃ for short-term use. Shelf life: 6

months.

## 【Protocol】

### 1. Deparaffinization and Rehydration

Immerse slides sequentially in: Xylene I (15 min) → Xylene II (15 min) → Xylene III (15 min) → 100% ethanol (10 min) → 90% ethanol (10 min) → 80% ethanol (10 min) → 70% ethanol (10 min) → Rinse with distilled water.

### 2. Antigen Retrieval

Place slides in a retrieval rack, submerge in 1x EDTA (pH 9.0) retrieval buffer, cover, and seal with tape. Microwave: Medium heat (8 min) → Rest (8 min) → Medium-low heat (8 min). Cool naturally, then treat with 3% H<sub>2</sub>O<sub>2</sub> for 15 min.

### 3. Blocking

Dry slides, draw a hydrophobic barrier (recommended: HKR14P in situ hybridization pen). Add 100 µL blocking buffer per slide, incubate at 37°C for 30 min in a hybridization oven/humid chamber. Wash once for 5 min. **Wash steps: Place slide racks in a wash tank, add wash buffer (ensure samples are submerged), and shake at 60 rpm for 5 min.**

### 4. Probe Hybridization

Remove excess liquid from slides. Add 100 µL of probe per slide and incubate at 37°C for 2 – 3 h (maintain humidity to prevent drying). Wash 5 times, 5 min each. **Wash steps: As described above.**

### 5. AP-Mouse Anti-Digoxin

Remove excess liquid from slides. Add 100 µL of AP-Mouse Anti-Digoxin (1X) per slide and incubate at 37 °C in a humidified chamber for 40 min. Wash 5 times, 5 min each. **Wash steps: As described above.**

### 6. Chromogenic Reaction

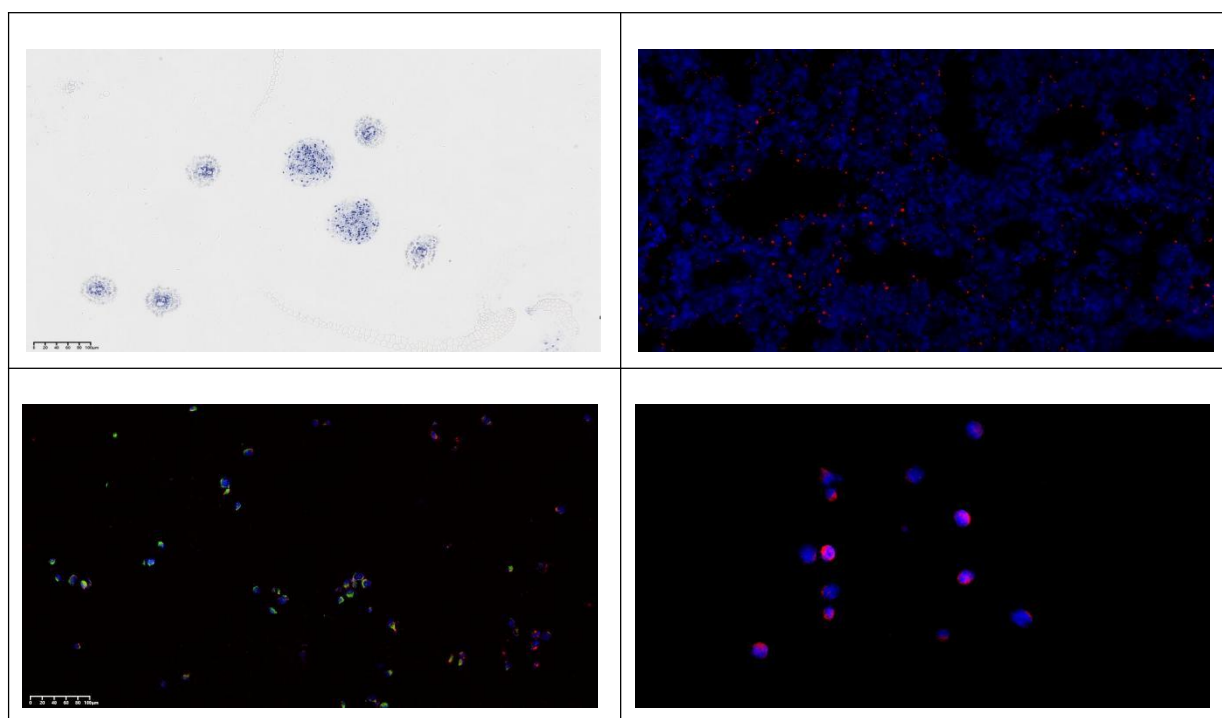
Prepare the chromogenic solution by adding 50 µL of NBT Chromogen Solution A and

50  $\mu$ L of NBT Chromogen Solution B to 1 mL of deionized water. Add 100  $\mu$ L of the mixture per slide and incubate at RT for 30 min. Rinse with distilled water to stop the reaction. Air-dry slides and mount with mounting medium.

### 【Precautions】

1. For research use only.
2. Wear lab coats and disposable gloves for safety.

### 【Example Images】



### 【Source of Reagents】

发表[中文论文]请标注:Rapid RNA FISH Kit(Plant)(HKR11Z)由杭州浩克生物技术有限公司提供;

发表[英文论文]请标注:Rapid RNA FISH Kit(Plant)(HKR11Z) were kindly provided by Hangzhou Haok  
e Biotechnology Co., Ltd.