

HaoKebio[™] Rapid RNA FISH Kit(Animal)

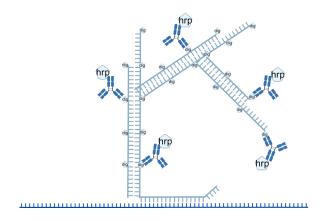
Catalog Number: HKR11D

[Product Information]

| Product Name | Catalog No | 30T | Storage | Shelf Life |
|---|------------|------|---------------------------------|---------------|
| Wash Buffer (powder, dissolve in 10L ddH2O) | HKR11-1 | 10L | | |
| HRP-Mouse Anti-Digoxin (100x) | HKR11-2 | 30uL | 400 | |
| TSA Chromogenic Solution 570nm (Optional) | HKR11-3 | 3mL | Short-term:4°C Long-term:-20°C | 12 months |
| Blocking Buffer | HKR11-5 | 3mL | | |
| Rapid 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 | Cell Climb | Cells |
|-------------|---------------|----------------|---------------|---------------|---------------|
| | | | Samples | Slides | |
| Treatment | Fix at RT | Vacuum fix | Dehydrate in | Fix at 4℃ | scrape off |
| | for 12h, | for 1h, RT fix | 15% sucrose | for 2h. | cells,fix in |
| | paraffin | for 12h, | at 4℃ for | | 4% PFA at |
| | embed | paraffin | 8h,then in | | 4°C for 2h, |
| | | embed. | 30% sucrose | | wash with |
| | | | at 4℃ for | | PBS, agarose |
| | | | 8h, OCT | | embed. |
| | | | embed. | | |
| Туре | mRNA | lncRNA | circRNA | miRNA | rRNA |
| Treatment | Fix at RT for | Fix at RT for | Fix at RT for | Fix at RT for | Fix at RT for |
| | 12h | 12h (<300bp: | 12h | 12h | 12h (<300bp: |
| | | 24h) | | | 24h) |

[Storage and Shipping]

Ship on wet ice; store at -20 $^{\circ}$ C for long-term or at 4 $^{\circ}$ C for short-term use. Shelf life: 6

months.

[Protocol]

1. Deparaffinization and Rehydration

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

2. Repair

Cell Samples:After the sections are completely dry, use a histology pen (recommended: HKR14P in situ hybridization-specific histology pen) to draw a hydrophobic circle of appropriate size. Place the slides horizontally in an in situ hybridization instrument or a humid chamber. Apply 100 μ L of Proteinase K repair solution (1X) onto the tissue and incubate at 37°C for 10 minutes. Rinse with pure water to stop the reaction.

Frozen Sections:For cell samples, after the sections are completely dry, use a histology pen (recommended: HKR14P in situ hybridization-specific histology pen) to draw a hydrophobic circle of appropriate size. Place the slides horizontally in an in situ hybridization instrument or a humid chamber. Apply 100 µL of Proteinase K repair solution (1X) onto the tissue and incubate at 37°C for 20 minutes (for frozen sections). Rinse with pure water to stop the reaction.

Paraffin Sections:Place the slide rack containing the slides into the repair chamber and pour in 1X citrate buffer (pH 6.0) repair solution (ensure the sample area is fully submerged). Cover the chamber, seal it with tape, and place it in a microwave oven. Heat at medium power for 8 minutes, rest for 8 minutes, then heat at medium-low power for another 8 minutes. Allow the solution to cool naturally, then block with 3% hydrogen peroxide for 15 minutes.

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 μ L of probe per slide and incubate at 37 $^{\circ}$ C for 2 - 3 h (maintain humidity to prevent drying). Wash 5 times, 5 min each. Wash steps: As described above.

5. HRP-Mouse Anti-Digoxin

Remove excess liquid from slides. Add 100 μ L of HRP-Mouse Anti-Digoxin (1X) per slide and incubate at 37 $^{\circ}$ C in a humidified chamber for 40 min. Wash 5 times, 5 min each. Wash steps: As described above.

6. Chromogenic Reaction

Remove excess liquid from slides. Add $100~\mu L$ of TSA Chromogenic Solution per slide and incubate at RT for 10~min. Rinse with distilled water to stop the reaction.

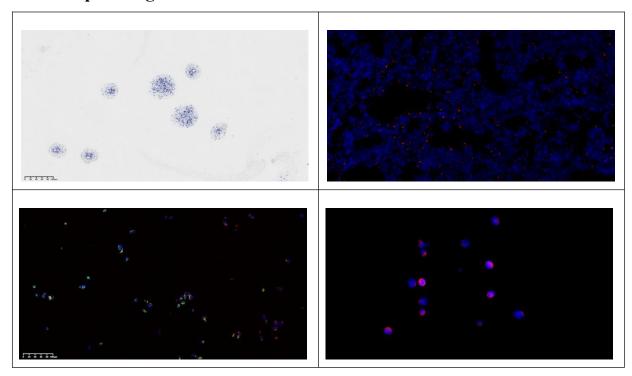
7. DAPI Staining

Add 50 μ L of DAPI staining solution per slide, incubate in the dark for 5 min, rinse with distilled water, and mount with anti-fade mounting medium.

[Precautions]

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

[Example Images]



【Source of Reagents】

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