

# RET Break Apart FISH Probe Kit

## Introduction

The RET Break Apart FISH Probe Kit is designed to detect rearrangements in the human *RET* gene located on chromosome band 10q11.21. In addition to revealing breaks, which can lead to translocation of parts of the gene, inversion, or its fusion to other genes, the probe set can also be used to identify other *RET* aberrations such as deletions or amplifications. Rearrangements and abnormal expression of the *RET* gene – also known as *PTC*, *MTC1*, *HSCR1*, *MEN2A*, *MEN2B*, *RET51*, *CDHF12*, *CDHR16* or *RET-ELE1* – have been observed in endocrine neoplasias, medullary and papillary thyroid carcinoma, pheochromocytoma and various other tumor types.

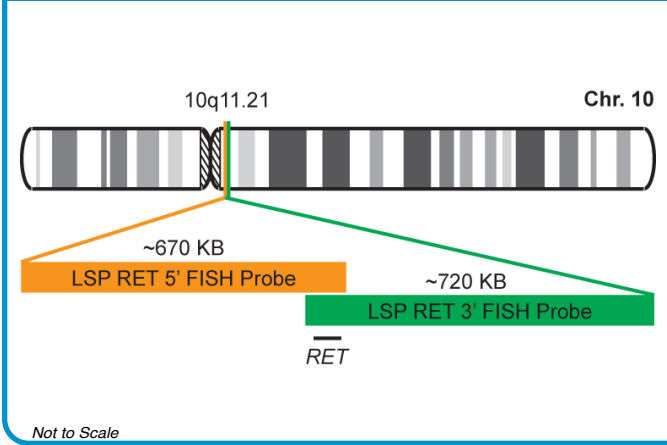
### Intended Use

To detect rearrangements in the human *RET* gene located on chromosome band 10q11.21.

Cont.	Color
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LSP RET 5' FISH Probe LSP RET 3' FISH Probe	CytoOrange CytoGreen
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## Probe Design



LSP RET 5' FISH Probe covers the *RET* gene and some sequences upstream of the 5' end. LSP RET 3' FISH Probe covers the gene as well as sequences downstream (3' end) of the gene. The two probes are flanking sequences across the *RET* gene in which various breakpoints have been observed.

Cat. No.	Volume
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CT-PAC051-10-OG	10 Tests (100 µL)
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### Signal Pattern Interpretation

<u>Normal Pattern</u> 2OG*	<u>Abnormal Pattern</u> Other Patterns
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\*Overlapping orange and green signals can appear as yellow.

- 1) Ishizaka Y, et al. *Oncogene*. 4(12):1519-21 (1989).
- 2) Mulligan LM, et al. *Nature*. 363(6428):458-60 (1993).
- 3) Ederly P, et al. *Nature*. 367(6461):378-80 (1994).
- 4) Bunone G, et al. *Cancer Res*. 60(11):2845-9 (2000).
- 5) Jhiang SM. *Oncogene*. 19(49):5590-7 (2000).



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\* CE IVD only available in certain countries. All other countries are either ASR or RUO. Please contact your local dealer or our headquarters for more information.

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