

#### **ENGLISH**

For Professional Use Only

# TERT/PAX5/SMAD6 FISH Probe Kit

## Introduction

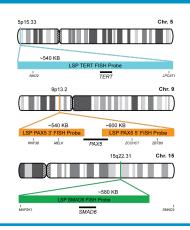
The TERT/PAX5/SMAD6 FISH Probe Kit is designed to detect the human TERT gene located on chromosome band 5p15.33, the PAX5 gene on chromosome band 9p13.2, and the SMAD6 gene on chromosome band 15q22.31. Abnormal expression of the TERT gene – also known as TP2, TRT, CMM9, EST2, TCS1, hTRT, DKCA2, DKCB4, hEST2 or PFBMFT1 - have been reported in a variety of tumor types. Rearrangements and abnormal expression of the PAX5 gene – also known as ALLL3, BSAP, or PAX-5 – have been observed in acute lymphoblastic leukemia (ALL) and in other lymphoproliferative disorders. Abnormalities in SMAD6 - also known as MADH7, MADH6, HsT17432, or AOVD2 - are associated with cardiac valve defects, developmental deficiencies, lung neoplasms and other malignancies.

### **Intended Use**

To measure the copy number of the human TERT, PAX5 and SMAD6 genes located on chromosome bands 5p15.33, 9p13.2 and 15q22.31, respectively.

Cont.	Color
LSP TERT FISH Probe	CytoAqua
LSP PAX5 5'-3' FISH Probe	CytoOrange
LSP SMAD6 FISH Probe	CytoGreen

# **Probe Design**



LSP TERT FISH Probe covers a chromosomal region which includes the entire TERT gene. LSP PAX5 5'-3' FISH Probe covers chromosomal regions which include the 5' and 3' ends of the PAX5 gene and the sequences adjacent to the two ends of the gene. LSP SMAD6 FISH Probe covers a chromosomal region which includes the entire SMAD6 gene.

Cat. No.	Volume

10 Tests (100 µL) CT-PAC455-10-AOG

# Signal Pattern Interpretation

Normal Patterns 202G2A

Abnormal Patterns Other Patterns

V2023.06.01

Not to Scale

<sup>1)</sup> Blackburn EH. *Nature*. 350(6319):569-73 (1991). 2) lida S, et al. *Blood* 88(11):4110-7 (1996). 3) Strehl S, et al. *Leukemia* 17(6):1121-3 (2003). 4) Jeon HS, et al. *Cancer Res*. 68(23):9686-92 (2008). 5) Fedeles SV, et al. *J Clin Invest*. doi: 10.1172/JCI78863 (2015).

CytoTest Inc. **IVD** 1395 Piccard Drive, Suite 308 Rockville, MD 20850, USA

<sup>\*</sup> 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. DCN032