













# Leukemia Probes for Pediatric ALL Research

Fluorescent in situ hybridization (FISH) is a cytogenetic technique used to detect genes or chromosomal regions in a DNA sample. FISH Acute lymphoblastic leukemia (ALL) makes up 75% of childhood leukemia diagnoses.<sup>1</sup> Treatment of the disease represents one of the greatest success stories in cancer research to date: since the 1960s, the survival rate has climbed from less than 10% to over 90%.<sup>2</sup> Despite this remarkable progress, a few high-risk subgroups still suffer poor clinical outcome. These groups are characterized primarily by their genetic profiles, with certain chromosomal lesions conferring a higher risk of disease progression.<sup>3</sup> Understanding the role of these mutations in ALL development will continue to serve as an active area of investigation in the research and clinical communities.

## Interested in conducting your own ALL research?

Empire Genomics' pediatric ALL FISH panel detect genetic aberrations frequently found in the disease. For more information, and to browse our complete catalog of disease panels, please visit our website.

Probes	Location	Dye Color	Catalog Number
ABL1 Break Apart	9q34.11-q34.13		ABL1BA-20-GROR
ABL2 Break Apart	1q25.2		ABL2BA-20-ORGR
BCR/ABL1/ASS1	22q11.23/9q34.12/9q34.11		BCR-ABL1-ASS1-20-GRORAQ
CRLF2 Break Apart	Xp22.33/Yp11.32		CRLF2BA-20-GROR
CSF1R Break Apart	5q32		CSF1RBA-20-ORGR
ETV6-RUNX1 Fusion	12p13.2/21q22.12		ETV6-RUNX1-20-GROR
IKZF1	7p12.2		IKZF1-20-OR
MEF2D Break Apart	1q22		MEF2DBA-20-GROR
MLL(KMT2A) Break Apart	11q23.3		MLLBA-20-GROR
PAX5	9p13.2		PAX5-20-OR
PDGFRB Break Apart	5q32		PDGFRBBA-20-ORGR
ZNF384 Break Apart	12p13.31		ZNF384BA-20-GROR

1. Wyatt KD, et al. (2019) Human immunology. 2. Bhojwani D, et al. (2015) Pediatric Clinics 62.1: 47-60. 3. PDQ Pediatric Treatment Editorial. (2019) Childhood ALL Treatment. NCI.

For In Vitro Use Only | For Research Use Only | Not For Diagnostic Use

