

# XL CDKN2A/9q22 Deletion Probe

Order No.:  
D-5118-100-0G

## Description

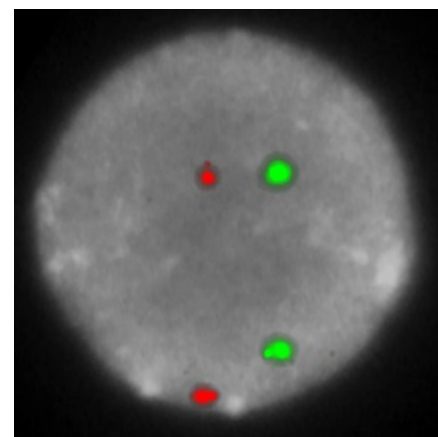
The XL CDKN2A/9q22 locus-specific probe detects deletions in band 9p21. This probe is labeled in orange and hybridizes to CDKN2A (p16) as well as CDKN2B (p15). A green labeled probe hybridizes to a specific locus at 9q22 and functions as a reference probe.

## Clinical Details

Acute lymphoblastic leukemia (ALL) is the most common childhood cancer type. T-cell acute lymphoblastic leukemia (T-ALL) is an aggressive and quickly progressing type of ALL affecting T-lymphocytes. Inactivation of the tumor suppressor genes CDKN2A/2B, located at chromosomal region 9p21, is a significant event in the development of T-ALL and other cancer types. Principally, loss of function might happen by deletion, methylation of promotor regions or mutations, whereas deletion of chromosomal region 9p21 seems to be the predominant mechanism. CDKN2A/2B deletions can be detected in about 60% of pediatric and about 50% of adult T-ALL cases. Most deletions are within the resolution of the FISH technique. Genetic alterations of the 9p21 locus result in loss of regulation of the cell cycle which is critical to cancer development.

### Literature:

- Novara et al (2009) Human Genet 126:511-520
- Sulong et al (2009) Blood 113:100-107
- Girardi et al (2017) Blood 129:1113-1123

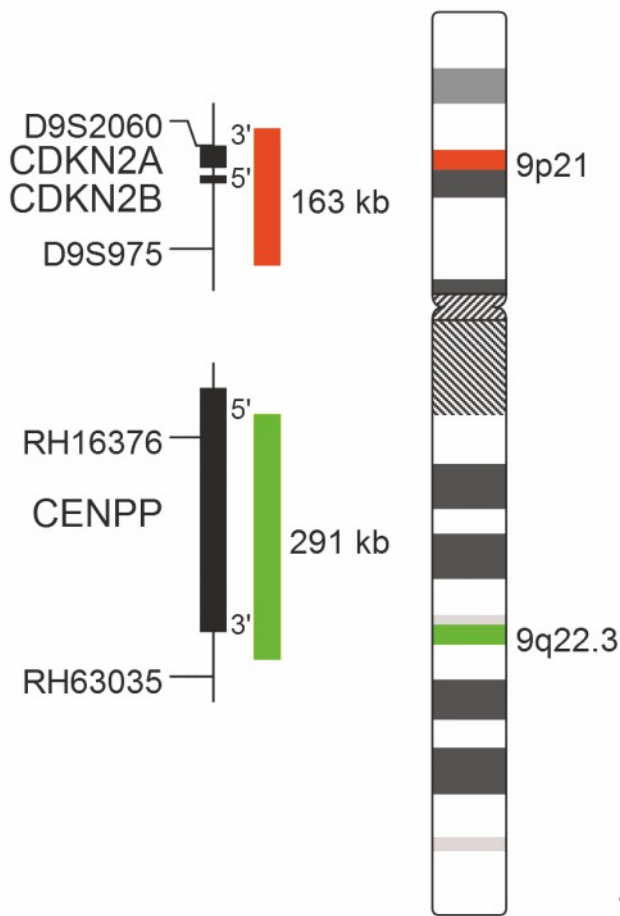


*XL CDKN2A/9q22 hybridized to lymphocytes. One normal interphase is shown. The expected signal pattern of XL CDKN2A/9q22, when hybridized to normal cells, is two orange and green separated signals representing the two CDKN2A chromosomal regions and the respective controls. The locus specific control region labeled in green is generating a signal comparable to CDKN2A signals in size and intensity. Heterozygous deletions of CDKN2A are indicated by the loss of one orange signal, homozygous deletions by the loss of both orange signals per cell.*

### Clinical Applications:

- ALL

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### Related Products

Product	Size	Order No.
XLCDKN2A	100 µl	D-5053-100-OG

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