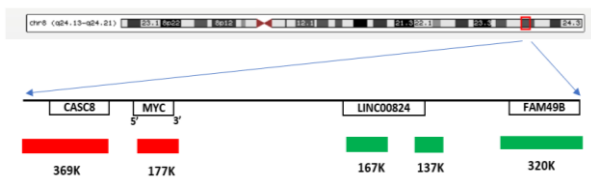


BRIGHTDOM FISH Probes: MYC (8q24) Break-apart

MYC (8q24) BAP



Gene: MYC (8q24); Centromere 5'-3' Telomere
5' region (Orange): hg38:chr8:127,278,971-127,841,056
Target size: 562K
3' region (Green): hg38:chr8:128,493,663-130,074,950
Target size: 1,581K
Functionally critical region: MYC gene, labeled orange.

Introduction: The MYC (8q24) break-apart FISH probe is optimized to detect translocations involving the MYC gene region at 8q24. The MYC gene locus is labelled with an orange dye, which enables the laboratory to detect insertion of MYC into IGH, IGK, IGL, or other gene locus as well as typical translocations.

5' ALK region (Green): The 5' region of MYC gene locus and MYC gene (8q24) are labeled with an orange dye.

3' ALK region (Orange): The 3' region of MYC (8q24) gene locus is labeled with a green dye.

Functionally critical region (Orange): The MYC gene locus is labeled with an orange dye.

Signal Patterns: The MYC (8q24) break-apart FISH probes are designed as dual-color break-apart probes to detect translocations at 8q24 as well as insertions of MYC into IGH, IGK, IGL, or other gene locus. A specimen considered positive for MYC rearrangement shows a separation of orange and green signals. The signal pattern of two fusion and one orange (2F1O) indicates an insertion of MYC gene into another gene locus. The signal pattern of one fusion and one green (1F1G) indicates a deletion of 8q24 including the MYC gene, while the signal pattern of one fusion and one orange (1F1O) suggests a deletion of 8q24 without affecting the MYC gene locus, or a translocation involving a deletion of 3' region of MYC gene locus. In each case, it is possible that the MYC gene is relocated to another gene locus, therefore, resulting in overexpression.