

MYC Break Apart FISH Probe

Ref: MAD-008M (10 test)

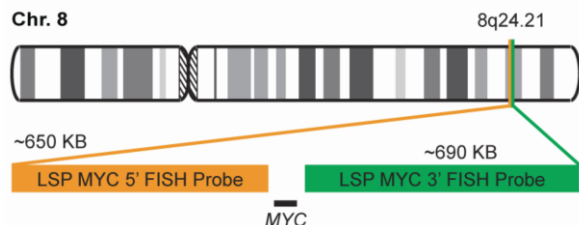
INTRODUCTION:

Rearrangements and abnormal expression of the MYC gene (also known as MRTL, MYCC, c-Myc or bHLHe39) has been described in Burkitt lymphoma, in which its positivity has diagnostic utility in a clinical, morphological and immunohistochemical context. On the other hand, diffuse large B-cell or non-classifiable lymphoma, the MYC translocation shows a prognostic value and dictates a more aggressive treatment of the neoplasia. On the other hand, along with the determination of the BCL2 and BCL6 genes translocation, it has the purpose of establishing the double or triple-hit character of the neoplasia. Other hematological neoplasias, myelomas, as well as breast, cervical, colon or ovarian tumors, among others, can show MYC translocation.

INTENDED USE:

The MYC Break Apart FISH probe is designed to detect rearrangements in the MYC human gene located in the chromosome band 8q24.21.

Aside from detecting breaks that can lead to translocation of parts of the gene, to its inversion or to its fusion with other genes, the probe can also be used to identify other aberrations of MYC such as deletions or amplifications.



PROBE DESCRIPTION:

The 5' centromeric fragment of the MYC Break Apart FISH probe labeled with the fluorochrome CytoOrange covers genomic sequences adjacent to the 5' portion (beginning) of the MYC gene. The 3' telomeric fragment of the MYC Break apart FISH probe labeled with CytoGreen covers some distal sequences (3' end) of the gene.

Both loci are flanking sequences of the MYC gene, in which variable cut-off points have been observed.

	Fluorochrome	Excitation	Emission
3' Fragment	CytoGreen	495 nm	518 nm
5' Fragment	CytoOrange	551 nm	575 nm

REFERENCE AND PRESENTATION:

MAD-008M – MYC Break Apart FISH Probe - 10 tests in ready-to-use format.

WORKING PROTOCOL:

The probe is validated for manual in situ hybridization on paraffin-embedded tissue sections following the instructions recommended in the FISH Pretreatment Kit (ref: MAD-FISH-PTK).

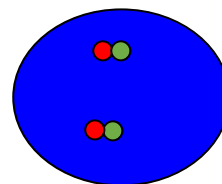
Note: It is recommended to shake the probe with the pipette before use.

The hybridization protocol for this probe is the following:

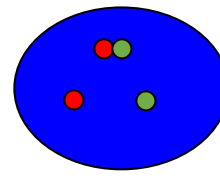
Denaturation: 80°C, 5 min

Hybridization: 43°C, 16 hours

INTERPRETATION:

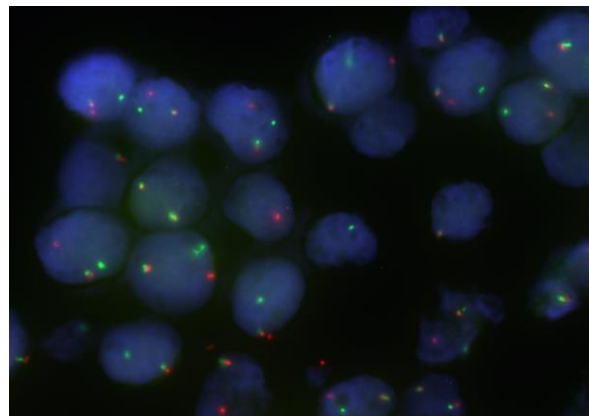


Cell without MYC translocation



Cell with MYC translocation

For the interpretation of the results of the fluorescence hybridization, it is recommended to apply the interpretation criteria in force and accepted worldwide.



Diffuse large B-cell lymphoma with positive MYC translocation.

WARNINGS AND PRECAUTIONS:

1. Avoid the contact of the reagents with the eyes and the mucous membranes. If the reagents come into contact with sensitive areas, wash them with plenty of water.
2. This product is harmful if swallowed.
3. Check with the local or state authorities about the recommended disposal method.
4. Avoid the microbial contamination of the reagents.

SAFETY RECOMMENDATIONS: The product is only intended for professional laboratory purposes, and it is not intended for pharmacological, home or any other type of use. The current version of the material safety data sheet of this product can be downloaded by searching its reference at www.vitro.bio or can be requested at regulatory@vitro.bio.

STORAGE: Keep refrigerated between 2 and 8°C until the expiration date of the product. **DO NOT FREEZE THE PRODUCT.**

BIBLIOGRAPHY

- 1: Ventura RA, Martin-Subero JI, Jones M, McParland J, Gesk S, Mason DY, Siebert R. FISH analysis for the detection of lymphoma-associated chromosomal abnormalities in routine paraffin-embedded tissue. *J Mol Diagn.* 2006 May;8(2):141-51.
- 2: Belaud-Rotureau MA, Parrens M, Dubus P, Turmo M, Lacroute G, Taine L, Vago P, De Mascarel A, Merlio JP. [Interphase FISH analysis on histologic sections of fixed tissues for t(11;14) (q13;q32) detection in mantle cell lymphoma and t(8;14)(q24;q32) in Burkitt's lymphoma]. *Ann Pathol.* 2002 Apr;22(2):145-9.
3. Kocjan G. Best Practice No 185. Cytological and molecular diagnosis of lymphoma. *J Clin Pathol.* 2005 Jun;58(6):561-7
4. Remstein ED, Kurtin PJ, Buño I, Bailey RJ, Proffitt J, Wyatt WA, Hanson CA, Dewald GW. Diagnostic utility of fluorescence in situ hybridization in mantle-cell lymphoma. *Br J Haematol.* 2000 Sep;110(4):856-62

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Expiration date
	Temperature limit
	Manufacturer
	Sufficient content for <n> assays
	Catalog number
	Lot code
	Refer to the instructions of use
	Medical product for <i>in vitro</i> diagnosis.
	Material safety data sheet
	Keep away from sunlight