
Product Data Sheet
6q23 (MYB) FISH Probe
Catalog#: F-MYB-(G,R,A,Y,D)

Gene Information:

MYB is a transcription regulator important for the regulation of proliferation and differentiation of hematopoietic progenitor cells. Cytogenetic amplifications, aberrant expression, and translocations have been observed in several cancers.

Clinical Relevance:**Melanoma:**

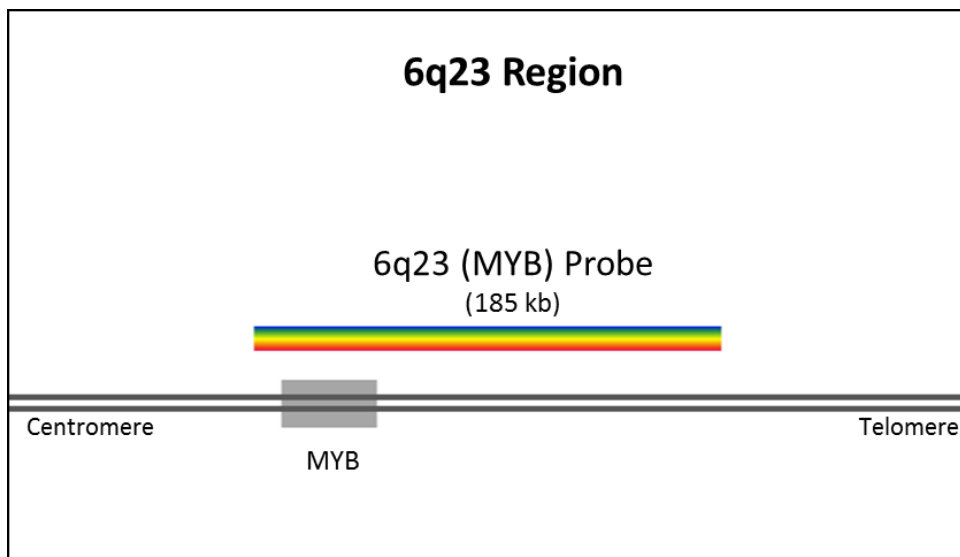
A commercial kit for the classification of malignant melanoma includes the identification of MYB amplifications along with other cytogenetic abnormalities.¹ More recent studies have identified additional cytogenetic markers that increase the sensitivity and specificity of the assay. These studies did not see a significant association of MYB amplifications in typical Melanoma, but did see a slight increase risk factor in Spitzoid Melanoma. See also CCND1, MYC, RREB1, and P16 as additional markers for Melanoma subtyping.²

Probe Specifications:

Probe and target gene boundaries are indicated in relation to proximity to the centromere or telomere. Positions are based on UCSC genome assembly GRCh37/hg19.

Locus	Target			Probe		
	Gene	Centromere	Telomere	Centromere	Telomere	Size (Kb)
6q23	MYB	135,502,453	135,540,311	135,491,383	135,676,863	185

Probe Map:



Product Contents:

All individual or FISH probe cocktails are provided ready to use in hybridization buffer and can be blended with up to 4 total probes. Blocking DNA is included to suppress non-specific binding to similar sequences outside of the indicated binding sites. Researchers are advised to optimize slide processing and hybridization conditions.

Volume: 250µl
 Reactions: 50 (5µl/ reaction)

Product Options:

All FISH probes are available in 5 standard color options (Red, Gold, Yellow, Green, and Aqua). Alternative custom color options are available.

Color	Dye	Absorbance	Emission	Ordering Code Extension
Red	Alexa594	590	615	R
Gold	Alexa555	555	565	D
Yellow	Alexa532	532	554	Y
Green	Alexa488	495	519	G
Aqua	DEAC	432	472	A

For Investigational Use Only. The performance characteristics of this product have not been established.

Storage:

Store at -20°C
Protect from direct light.

References:

1. Gaiser T, Kutzner H, Palmedo G, Siegelin MD, Wiesner T, Bruckner T, Hartschuh W, Enk AH, Becker MR. Classifying ambiguous melanocytic lesions with FISH and correlation with clinical long-term follow up. *Mod Pathol.* 2010 Mar;23(3):413-9. doi: 10.1038/modpathol.2009.177. Epub 2010 Jan 15. PubMed PMID: 20081813.
2. Ferrara G, De Vanna AC. Fluorescence In Situ Hybridization for Melanoma Diagnosis: A Review and a Reappraisal. *Am J Dermatopathol.* 2016 Apr;38(4):253-69. doi: 10.1097/DAD.0000000000000380. PubMed PMID: 26999337.