
Product Data Sheet
6p25 (RREB1) FISH Probe
Catalog#: F-RREB1-(G,R,A,Y,D)

Gene Information:

RREB1 (Ras Responsive Element Binding Protein 1) is a transcription factor that binds to RAS-responsive elements (RREs) of gene promoters. RREB1 is believed to be involved in Ras/Raf-mediated cell differentiation by enhancing calcitonin expression.

Clinical Relevance:**Melanoma:**

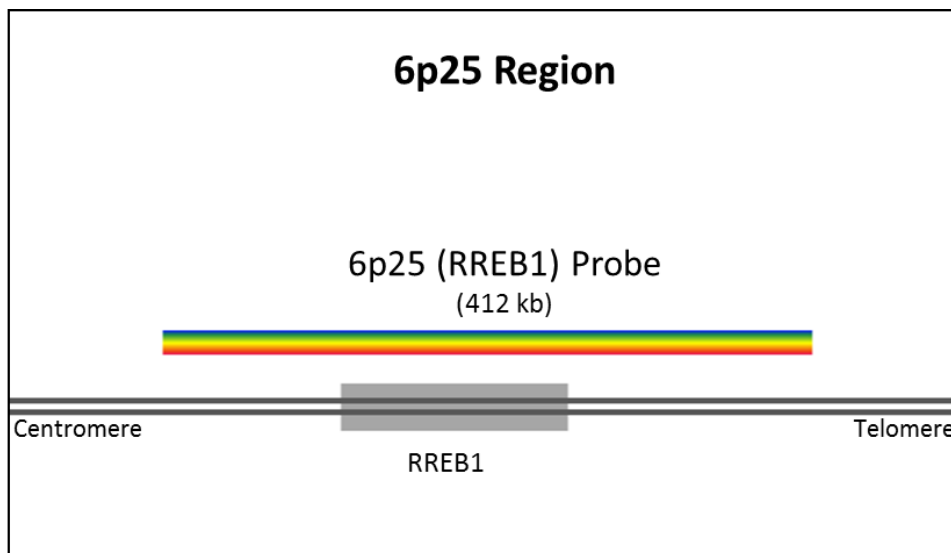
A commercial kit for the classification of malignant melanoma includes the identification of RREB1 amplifications along with other cytogenetic abnormalities.¹ More recent studies have identified additional cytogenetic markers that increase the sensitivity and specificity of the assay. These studies have specifically shown that amplifications of RREB1 are associated with aggressive subtypes of typical Melanoma and Spitzoid Melanoma. See also MYB, MYC, CCND1, 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)
6p25	RREB1	7,108,086	7,252,213	6,995,162	7,406,673	412

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.