

### Poseidon™ Repeat Free™ MDM4 (1q32) / SE 1 Control probe

**Introduction:** The MDM4 (MDMX) gene located on 1q32 is a target for amplification in malignant gliomas. MDM4 codes for a MDM2-related protein that can bind to p53 and inhibits p53-mediated transcriptional transactivation.

**Intended use:** The **MDM4 (1q32)** specific DNA probe is optimized to detect copy numbers of the MDM4 gene region at region 1q32.  
The Chromosome 1 Satellite Enumeration (SE) probe at 1qh is included to facilitate chromosome identification.

The probe is recommended to be used in combination with a Poseidon FISH Kit providing necessary reagents to perform FISH (KBI-60002, KBI-60003 or KBI-60001) for optimal results.

**Critical region 1 (red):** The **MDM4 (1q32)** gene region probe is direct-labeled with PlatinumBright550.

**Control region 2 (green):** The **SE 1** control probe is direct-labeled with PlatinumBright495.

**Reagent** Poseidon probes are direct-labeled DNA probes provided in a ready-to-use format. Apply 10 µl of probe to a sample area of approximately 22 x 22 mm.

**Please refer to the Instructions for Use for the entire Poseidon FISH protocol.**

**Poseidon Repeat Free probes do not contain Cot-1 DNA. Hybridization efficiency is therefore increased and background, due to unspecific binding, is highly reduced.**

**Interpretation:** The **MDM4 (1q32)** probe is designed as a dual-color assay to detect amplification at 1q32. Amplification involving the MDM4 gene region at 1q32 will show several red signals, while the control at the chromosome 1 centromere will provide 2 green signals.  
Two single color red (R) and green (G) signals will identify the normal chromosomes 1 (2R2G).

	Normal Signal Pattern	1q32 Amplification
Expected Signals	2R2G	3+R2G

**References:** Riemenschneider et al, 1999, Cancer Res. 59 ; 6091-6096  
Danoviet al, 2004, Mol.Cell.Bio. 24; 5835-5843



## Application Manual

KBI-10736  
ON MDM4 (1q32) / SE 1



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