

## Poseidon™ Repeat Free™ MDM2 (12q15) & SE12 Control probe

**Introduction:** The MDM2 gene has been shown to be abnormally up-regulated in human tumors and tumor cell lines by gene amplification. This gene amplification has been described for 19 tumor types, with the highest frequency observed in soft tissue tumors (20%), osteosarcomas (16%) and esophageal carcinomas (13%).

**Intended use:** The **MDM2 (12q15)** specific DNA Probe is optimized to detect copy numbers of the MDM2 gene region at region 12q15. The Chromosome 12 Satellite Enumeration (SE) probe 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 **MDM2 (12q15)** gene region probe is direct-labeled with PlatinumBright550.

**Control region 2 (green):** The **SE12** 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 **MDM2 (12q15)** probe is designed as a dual-color assay to detect amplification at 12q15. Amplification involving the MDM2 gene region at 12q15 will show several red signals, while the control at the chromosome 12 centromere region will provide 2 signals. Two single color red (R) and green (G) signals will identify the normal chromosomes 12 (2R2G).

	Normal Signal Pattern	12q15 Amplification
Expected Signals	2R2G	3+R2G

**References:** Elkahlon et al, 1996, Genes Chrom. Canc. 17; 205-214  
Momand et al, 1998, Nucleic Acid Res. 26; 3453-3459

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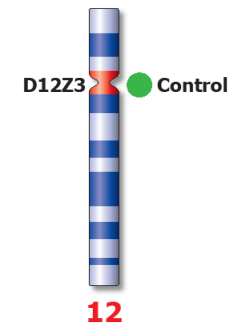
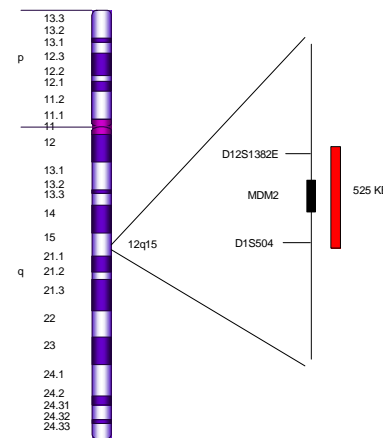
## Application Manual

KBI-10717  
ON MDM2 (12q15) / SE 12



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Application manual