

## Poseidon™ Repeat Free™ EGFR, Her-1 (7p11) & SE 7 Control probe

**Introduction:** EGFR (Her-1) is a member of a family of four cell surface membrane receptors (Her-1, Her-2, Her-3, Her-4). Increased activity at the EGFR receptor has been shown to occur in a variety of solid tumors including glioblastoma, non-small cell lung carcinomas, many head/neck carcinomas, and carcinomas of the colon, breast, prostate, stomach, and ovary and is caused by amplification in many tumors. EGFR expression has been correlated with poor prognosis for some types of carcinomas.

**Intended use:** The **EGFR (7p11)** specific DNA Probe is optimized to detect copy numbers of the EGFR (Her-1) gene region at region 7p11. The Chromosome 7 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 **EGFR (7p11)** specific DNA probe is direct-labeled with PlatinumBright550.

**Control region 2 (green):** The **SE 7** control DNA 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 **EGFR (7p11)** probe is designed as a dual-color assay to detect amplification at 7p11. Amplification involving the EGFR gene region at 7p11 will show several red signals, while the control at the chromosome 7 centromere region will provide 2 signals. Two single color red (R) and green (G) signals will identify the normal chromosomes 7 (2R2G).

	Normal Signal Pattern	Amp(7p11)
Expected Signals	2R2G	> 5R2G

**References:** Shimizu N et al, 1994, Jpn.J.Cancer Res., 85; 567-571  
Jolly C et al, 1997, Hum.Genet., 101; 81-87

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# POSEIDON™

REPEAT-FREE™ FISH PROBES



## Application Manual

KBI-10702

ON EGFR, Her-1 (7p11) / SE 7



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