

# Kreatech™ FISH probes

## Product Information Sheet

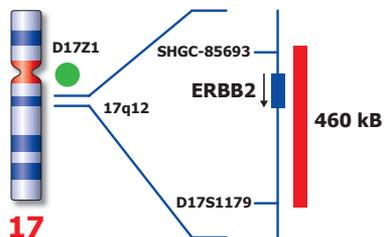
KBI-10701  
ERBB2 (17q12) / SE 17



**Kreatech Biotechnology B.V.**  
Vierweg 20  
1032 LG Amsterdam  
The Netherlands  
[www.LeicaBiosystems.com](http://www.LeicaBiosystems.com)

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Not to scale

## Kreatech™ ERBB2 (17q12) / SE 17 FISH probe

**Introduction:** The proto-oncogene ERBB2 (also known as HER-2/*neu*) resides on chromosome 17q and encodes a trans-membrane tyrosine kinase growth factor receptor. Amplification of the ERBB2 gene, erbB-2 protein, is found in 20-30% of breast cancers and is also found to be amplified in prostate carcinoma, gastric cancer and uterus cancer. ERBB2 has been shown to predict response to specific breast cancer chemotherapeutic regimens, especially when combined with the humanized monoclonal antibody (MAb) Herceptin

**Intended use:** The **ERBB2 (17q12)** specific FISH probe is optimized to detect copy numbers of the ERBB2 (Her2/*neu*) gene region at region 17q12. The **Satellite Enumeration (SE) 17** FISH probe is included to facilitate chromosome identification.

The probe is recommended to be used in combination with one of the Kreatech Pretreatment kits providing necessary reagents to perform FISH on various sample types for optimal results. (see also [www.LeicaBiosystems.com](http://www.LeicaBiosystems.com) and look for Kits & reagents)

**Critical region 1 (red):** The **ERBB2 (17q12)** specific FISH probe is direct-labeled with PlatinumBright™550.  
**Control region 2 (green):** The **SE 17** specific FISH probe gene region is direct-labeled with PlatinumBright™495.

**Reagent:** Kreatech 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 Kreatech FISH protocol.**

**Kreatech FISH probes are REPEAT-FREE™ and therefore do not contain Cot-1 DNA. Hybridization efficiency is increased and background, due to unspecific binding, is highly reduced.**

**Interpretation:** The **ERBB2 (17q12) / SE 17** FISH probe is designed as a dual-color assay to detect amplification at 17q12. Amplification involving the ERBB2 gene region at 17q12 will show several red signals, while the control at the chromosome 17 centromere region will provide 2 green signals. Two single color red (R) and green (G) signals will identify the normal chromosomes 17 (2R2G).

	Normal Signal Pattern	Amp(17q12)
Expected Signals	2R2G	3+R2G

**References:** Slamon D et al, 1988, Science, 240; 1795-1796

**Warning and precautions:** In case of emergencies check SDS sheets for medical advice. SDS sheets may be obtained by either contacting Leica Technical Support or visiting [www.LeicaBiosystems.com](http://www.LeicaBiosystems.com). DNA probes contain formaldehyde which is a teratogen; do not inhale or allow skin contact. Wear gloves and a lab coat when handling DNA probes. All materials should be disposed of according to your institution's guidelines for hospital waste disposal.

**Reagent Storage and Handling:** Store at 2-8 °C. Reagents should not be used after the expiration date on the vial label.

**TECHNICAL SUPPORT** Technical support is available at [www.LeicaBiosystems.com](http://www.LeicaBiosystems.com) or +31 20 6919181 or via e-mail: [kreatech-support@leicabiosystems.com](mailto:kreatech-support@leicabiosystems.com).

**CUSTOMER SERVICE** Kreatech probes may be ordered through Leica Customer Service +31 20 6919181 or order via e-mail: [purchase.orders@leica-microsystems.com](mailto:purchase.orders@leica-microsystems.com).