

# TECHNICAL TIPS OF THE MONTH

## MAY 2008



### What is the difference between identical probes for cytological samples and for solid tumors (e.g. difference between KBI-10208 ON hTERT and KBI-10709 ON hTERT)

The two probes have exactly the same design, but they differ because of the composition of the hybridization buffer in which they are diluted. The hybridization buffer of KBI-10208 is optimized for cytological samples (e.g. metaphase and interphase cells from peripheral blood cultures or direct preparations by standard cytogenetic methods).

The hybridization buffer of KBI-10709 is optimized for paraffin embedded tissues. Since the probes are in the ready-to-use format, it is important not to confuse the probe for cytological or for solid samples.

As the composition of the probe is exactly the same, the map in the application manual consequently is the same. In the app man for the tissues it is clearly mentioned that these probes are optimized for tissue applications. So the app manuals are NOT IDENTICAL.

### Can we combine different POSEIDON probes (e.g. centromeric with telomeric probes)?

Yes, POSEIDON probes can all be mixed together. Regarding this, Sub-Telomere DNA probes (ST), Whole Chromosome Probes (WC) and Satellite DNA probes (SE) are supplied in a 5x concentrated format, to allow mixing of up to 5 probes in a single hybridization assay.

### Can the KBI-40002 probe also be used for cells different than uncultured amniocytes?

The prenatal probes are optimized on uncultured amniotic cells. This does not preclude their usage in any different cell type for FISH analysis (e.g., cultured amniocytes, cell lines, blood).

### Do SE probes labeled with blue have the same price?

Yes, they have the same price. In general we offer Blue in addition to Red and Green for all SE, ST and WC probes upon request for the same price, but with a delivery time of approx 2 – 3 weeks upon order receipt (except those WC probes where we have blue labeled probes on stock – this is indicated in the ordering information in the catalog, e.g. KBI-30003).

### What is the difference between KBI-10003 and KBI-10007?

KBI-10003 is a Dual-Color Assay, KBI-10007 is a Triple-Color Assay. The FIP1L1-Chic2-PDGFR A Dual-Color probe is optimized to detect

the Chic2 deletion at 4q12 associated with the FIP1L1/PDGFR A fusion in a dual-color, dual-fusion assay. It also allows the detection of translocation involving the FIP1L1 and PDGFR A region. However, chromosome 4 polyploidy may provide additional signals not associated with a translocation involving 4q12.

The FIP1L1-Chic2-PDGFR A Triple-Color probe is optimized to detect the Chic2 deletion at 4q12 associated with the FIP1L1/PDGFR A fusion in a dual-color, dual-fusion assay. It also allows the detection of translocation involving the FIP1L1 and PDGFR A region. The split of the green and blue signal will indicate a translocation at 4q12 independent of a possible chromosome 4 polyploidy.

### Is the TSA amplification signal system (From Perkin Elmer) compatible with Kreaboostr?

Yes, it is compatible. It can be used both in combination with FISHBright Biotin labeled probes, and with FISHBright (all different fluorophores).

### How can we recognize the probes that are suitable for paraffin embedded tissues?

These are all the probes with a KBI-107xx Cat#.

### We store our Vysis FISH probes at -20°C. On the Poseidon probes it states storage at 2 - 8°C. How is this difference relevant for me?

The Vysis probe is supplied in a pre-denatured form. In order to prevent re-annealing, these probes must be kept at -20°C. On the other hand, the POSEIDON probes are supplied in a native double-stranded form and therefore can be kept at 2-8°C. It is therefore not necessary to freeze our probes, which we believe also is a handling advantage because you do not have to unfreeze the probe before use.

Tests with Poseidon probes have been done at 2-8°C and also for higher temperatures, up to 50 °C, to support prolonged stability.

### I recently bought a POSEIDON probe, but it seems one vial is missing

No. If you bought a new POSEIDON probe this year with the catalog number "KBI", it is a repeat-free probe which is supplied in a ready-to-use format. If you have been using the old version repeat-containing probes (cat.nos. "KB"), they were supplied 5x concentrated and therefore included an additional vial containing a buffer to dilute the probe in. With the new ready-to-use probe, supplying this buffer in a separate vial is no longer necessary.