TERC (3q26.2)/5p15.2/20q13.2/CC7 Four Color FISH Probe

Control Number: 902-7051-081715

Catalog Number: PFR7051A
Description: TERC (3q26.2) / 5p15.2 / 20q13.2 /CC7 Four Color FISH Probe

Dilution: Ready-to-use
Volume: 100 µL

Intended Use:
For Research Use Only. Not for use in diagnostic procedures.

Summary and Explanation:
Cervical cancer is one of the most common cancers affecting women worldwide. The implementation of cytogenetic based screening techniques has greatly reduced the incidence and mortality of cervical cancer in the United States[1]. Moreover, traditional screening methods such as Pap smears and human papillomavirus (HPV) based testing are utilized to stratify and identify patients with high grade cervical cancer[2]. Furthermore, the utilization of fluorescence in situ hybridization (FISH) HPV-cervical cancer based tests allow for the detection of several hallmark cytogenetic abnormalities commonly identified in cervical carcinoma[2, 3]. Specifically, chromosomal gains at TERC (3q26), 5p15, 20q13 and copy control 7 are commonly associated with cervical cancer[1, 2, 3]. Conventional cytogenetic techniques such as FISH can be used to detect these chromosomal abnormalities.

Principle of Procedure:
The TERC (3q26.2)/5p15.2/20q13.2/CC7 Four Color FISH Probe is designed to detect ~618 kb of the TERC (3q26.2) region and is labeled in red, ~353 kb of the 5p15.2 (CTNND2) region which is labeled in green; ~377 kb of the 20q13.2 (ZNF217) region labeled in orange and an aqua CC7 probe targeting the centromeric region of chromosome 7.

Species Reactivity: Human
Known Application:
Fluorescence In-situ Hybridization (FISH) on formalin-fixed paraffin-embedded (FFPE) tissues.
Supplied As: Probe in hybridization buffer.
Storage and Stability:
Store probe at -20ºC and away from light. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date.

Technical Note:
Biocare Medical Four Color FISH probes are optimized to provide the best signal performance using optical filters that can accommodate the excitation/emission wavelengths specified below. Using filters outside these spectral specifications may produce sub-optimal results.

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation (nm)</th>
<th>Emission (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUA</td>
<td>434</td>
<td>481</td>
</tr>
<tr>
<td>GREEN</td>
<td>498</td>
<td>522</td>
</tr>
<tr>
<td>ORANGE</td>
<td>537</td>
<td>556</td>
</tr>
<tr>
<td>RED</td>
<td>592</td>
<td>628</td>
</tr>
</tbody>
</table>

Limitations:
This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may
vary and it is the responsibility of the end user to determine the appropriate application for its use.

**Precautions:**

1. This product contains formamide, which may be toxic. Formamide may cause serious eye damage or reproductive toxicity. It may also cause irritation by inhalation or skin contact. Avoid any direct contact exposure to reagent. Take appropriate protective measures (use disposable gloves, protective glasses, and lab garments). The SDS is available upon request and is located at [http://biocare.net](http://biocare.net).

2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water.

**Technical Support:**

Contact Biocare's Technical Support at 1-800-542-2002 for questions regarding this product.

**References:**


