

**Catalog Number:** HPV31-HPV45-21-R-NP**Description:** 21 Test**Intended Use:**

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

**Summary & Explanation:**

The NISH HPV 31/45 Probe is designed for the qualitative detection of E6/E7 mRNA from human papillomavirus (HPV) types 31 and 45 in formalin-fixed, paraffin-embedded (FFPE) tissue sections. These high-risk HPV genotypes are commonly studied in association with viral-related cellular changes.

**Principle of Procedure:**

NISH HPV 31/45 Probe is used on FFPE tissue sections in an in-situ hybridization (ISH) procedure. Following dewaxing and heat-induced epitope retrieval (HIER), the probe hybridizes to complementary HPV sequences. A chromogenic detection system is then applied, producing a visible signal at the site of hybridization that can be observed under a brightfield microscope.

**Species Reactivity:** Human**Known Application:** *in situ* hybridization on FFPE tissue**Supplied As:** Probe in hybridization buffer.**Materials and Reagents Required but Not Provided:**

- Cover (NPRI10002T1300)
- High-AR (NPRI10003L2T2250)
- TBS Tween 20 Buffer 10X (NPRI10007MMT84)
- Cleaning Solution (NPRI10008MMT84)
- DAB Enhancer (NPRI10005L2T3600)
- DEWAX (NPRI10001T280)
- Contrast Hematoxylin HDH3 (NPRI10006L2T3600)
- NISH Detection Kit (AP or HRP)
- NISH Chromogen Kit (DAB or Red)
- Light Microscope (40-400X magnification)
- NeoPath Pro Automated Stainer (NPP0001)

**Storage and Stability:**

Store probe at 4°C 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.

**Instructions for Use:**

This probe is intended for use with the NeoPath Pro. Refer to the User Manual for specific instructions for use. Protocol parameters in the Protocol Editor should be programmed as follows:

**Protocol Name:** Protocol is dependent on the detection being used.

- HPV31\_45\_NISH\_HRP
- HPV31\_45\_NISH\_AP

**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. 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.<sup>1</sup>

**Health Hazard****Technical Support:**

Contact Empire Technical Support at +1.800.715.5880 for questions regarding this product.

**References:**

1. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory workers from occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.