Nick translation DNA labeling system 2.0

Nick translation system for preparing FISH probes

The Nick Translation DNA Labeling System 2.0 provides a simple and efficient method for generating labeled DNA. The complete system includes all of the necessary reagents required for 50 Nick translation reactions and is recommended for labeling of double stranded DNA larger than 1kb for fluorescent in situ hybridization (FISH) applications.

The Nick Translation DNA Labeling System 2.0 can accommodate a wide range of fluorophore-labeled, biotin-labeled, and digoxigenin-labeled nucleotides. In addition to choice of label, the kit design allows the user to optimize incorporation and product size by adjusting the ratio of labeled-dUTP to dTTP. The ready-to-use NT Enzyme Mix is user friendly and minimizes error from pipetting.

Probes labeled by nick translation can be used in many different hybridization techniques including: *in situ* hybridization (ISH), fluorescent *in situ* hybridization (FISH), screening gene banks by colony or plaque hybridization, DNA or RNA transfer hybridization, and reassociation kinetic studies.

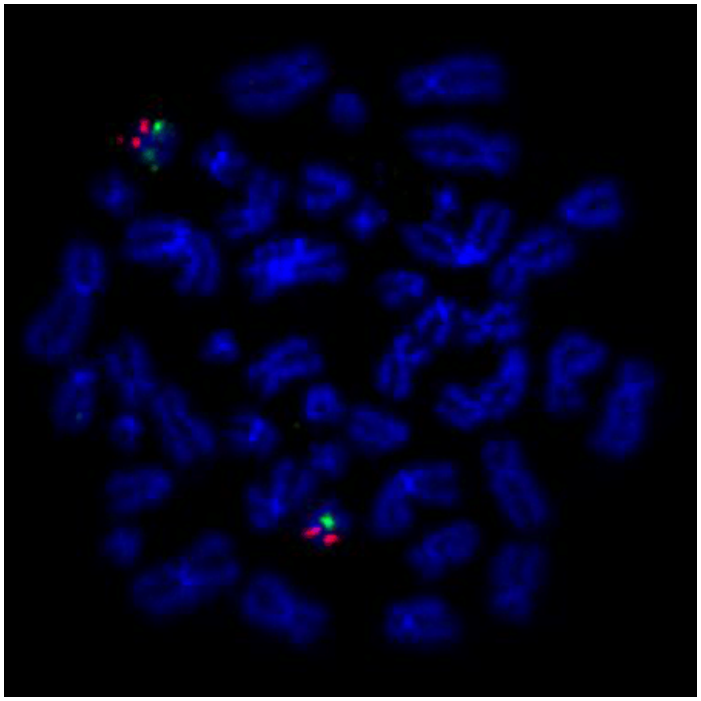
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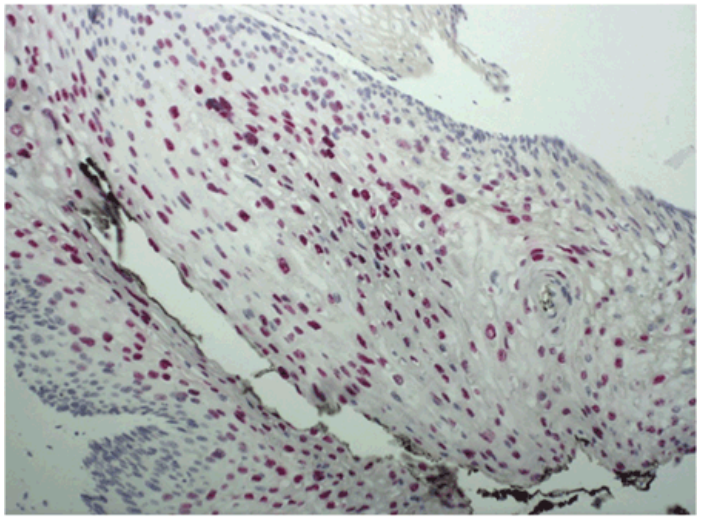
ENZ-GEN111-0050	50 tests

Manuals, SDS & CofA View Online »

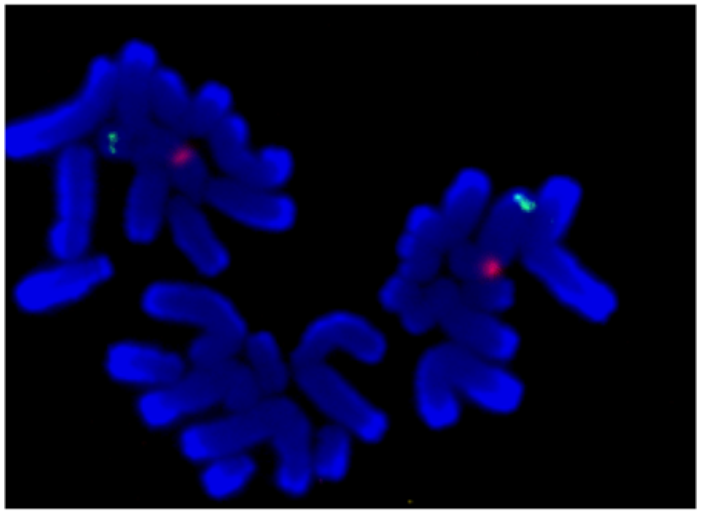
- Ready-to-use Nick Translation Enzyme Mix minimizes pipetting error
- Short labeling time - only 1 hour
- Validated with fluorophore, biotin, and digoxigenin labeled dUTPs



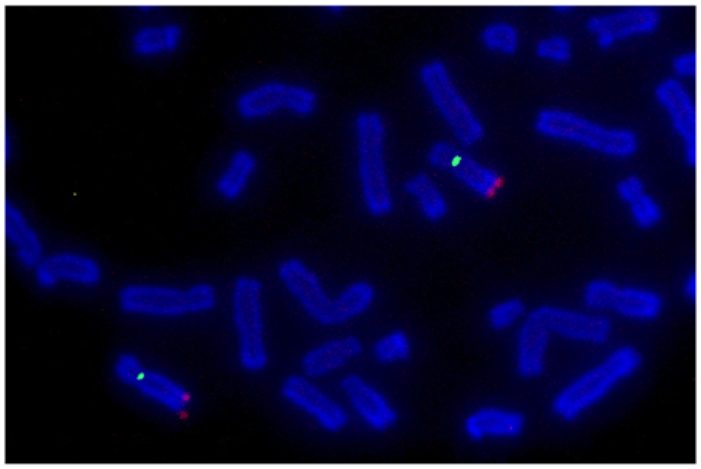
Nick Translation DNA Labeling System 2.0 (ENZ-GEN111) was used to label BAC DNA probe for TP53 with Orange 552 dUTP (ENZ-42842) and BAC DNA probe for Centromere 17 with Green 496 dUTP (ENZ-42831). Labelled probes were hybridized to metaphase spreads. (Institut Universitaire du Cancer Toulouse Oncopole)



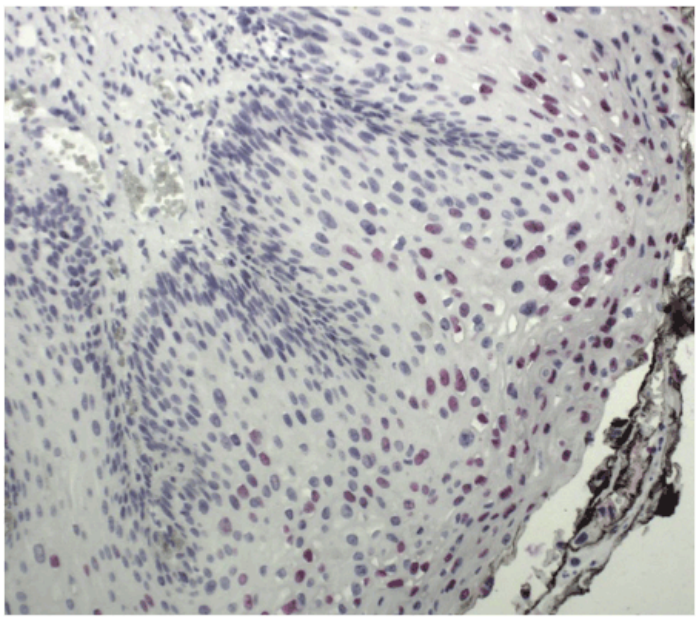
Hybridization of a biotin-labeled HPV Type 6/11 probe to cervical biopsy tissue. Visualized with streptavidin-AP and HIGHDEF® red IHC chromogen (AP) (ADI-950-140).



Hybridization of a Green 496 labeled BAC probe to c-Myc and an Orange 552 labeled centromere 8 probe to metaphase spread human chromosomes.



Hybridization of a Red 650 labeled BAC probe to c-Myc and a Green 496 labeled centromere 8 probe to metaphase spread human chromosomes.



Hybridization of a digoxigenin-labeled HPV Type 6/11 probe to cervical biopsy tissue. Visualized with anti-dig-AP and HIGHDEF® red IHC chromogen (AP) (ADI-950-140).

Handling & Storage

Use/Stability	Stable for at least one year after receipt when stored as recommended.
Handling	Avoid freeze/thaw cycles.
Long Term Storage	-20°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application

FISH, ISH (in situ hybridization)

Contents

NT Enzyme Mix 250 µL
Reaction Buffer 250 µL
dNTP Mix (dATP, dGTP, dCTP) 250 µL
dTTP 180 µL
Stop Buffer 250 µL
Nuclease-free Water 5 mL

Technical Info / Product Notes

Application Notes:
Assessing the Effects of Humidity on FISH Using the Nick Translation DNA Labeling System 2.0

Last modified: May 29, 2024

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