

ISH



LNA™ ISH

In situ hybridization detection of:

- microRNA • mRNA • lncRNA • DNA

Transform your *in situ* hybridization with LNA™

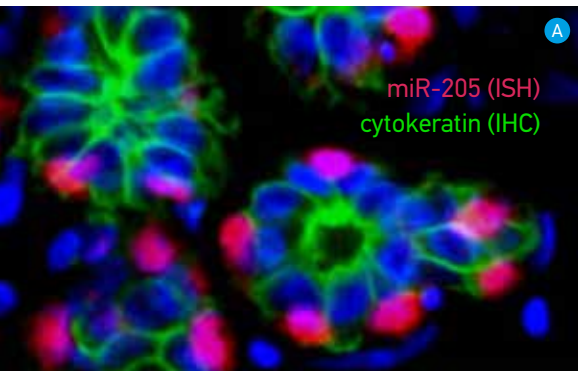
- Higher specificity – single nucleotide discrimination
- Higher affinity – 1 hour hybridization even for lowly expressed targets
- T_m normalization – ideal for multiplexing and automation

EXIQON
Seek Find Verify

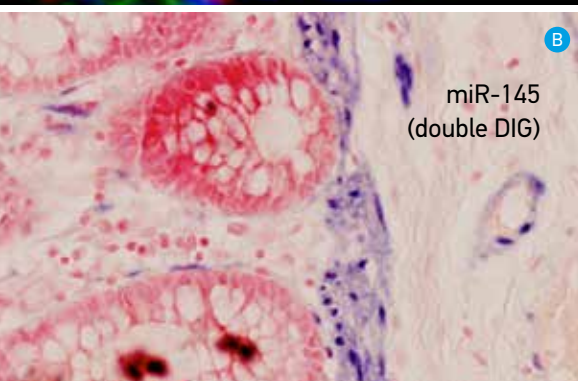
microRNA ISH

LNA™ technology is best-in-class for the detection of small RNA species

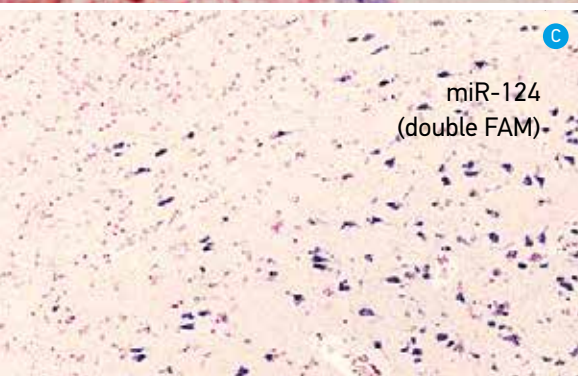
- **miRCURY LNA™ detection probes for all known microRNAs** - and custom sequences
- **Unmatched sensitivity and specificity** - robust detection of even low abundance microRNA demonstrated by numerous peer-reviewed publications
- **Wide range of sample types** - whole mount, single cells, cryosections, archival FFPE tissue sections
- **Validated One-day ISH protocol** – ideal for biobank and experimental FFPE samples
- **ISH Optimization Kits** – the shortcut to successful microRNA ISH
- **Robust and ready for automation** - LNA™ probes are *T_m* normalized to enable one standardized protocol for multiple targets
- **Chromogenic or fluorescent detection**
- **Ideal for co-localization and multiplexing** - detection of two microRNAs on the same slide, or dual-staining of microRNA and protein (ISH and IHC)
- **Increased sensitivity with double DIG and double FAM labels** - biotin, and other labels available on demand



miR-205 (ISH)
cytokeratin (IHC)



miR-145
(double DIG)



miR-124
(double FAM)



miR-122a

miR-206

miR-124a

- A** Co-detection of microRNA and protein in normal mammary gland
- B** microRNA detection in human colon FFPE tissue
- C** microRNA detection in human brain FFPE tissue
- D** microRNA detection in wholemount zebrafish

ISH Optimization Kits

Everything you need to get started with microRNA ISH including validated positive control probes for a range of tissues, Scrambled and U6 control probes, formamide-free hybridization buffer and Proteinase K.

miRCURY LNA™ microRNA Detection Probes and ISH Optimization Kits

Learn more

exiqon.com/ish

“We got beautiful results repeatedly and could even detect the probes fluorescently”

Maša Milatovič, University of Ljubljana

mRNA and lncRNA ISH

LNA™-enhanced probes offer superior sensitivity and specificity compared to standard DNA or RNA probes

- **Ready to use probes** - no cloning needed
- **Designed in minutes** using our online design tool developed by Exiqon's LNA™ experts
- **Short probes ideal for distinguishing highly similar sequences** - for example splice variants, isoforms, and detection of disease-related trinucleotide repeats
- **Excellent tissue penetration**
- **Wide range of sample types** - whole mount, single cells, cryosections, archival FFPE tissue sections
- **Increased sensitivity with double DIG and double FAM labels** - biotin, and other labels available on demand

LNA™ ISH probes for any mRNA or lncRNA

Go to the design tool at
exiqon.com/mrnainsitu

LNA™ FISH

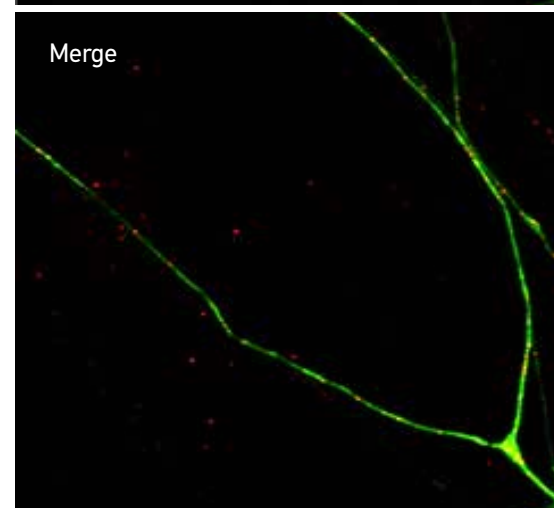
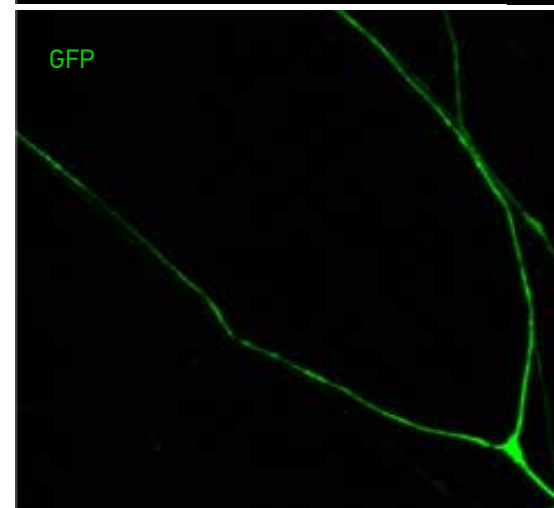
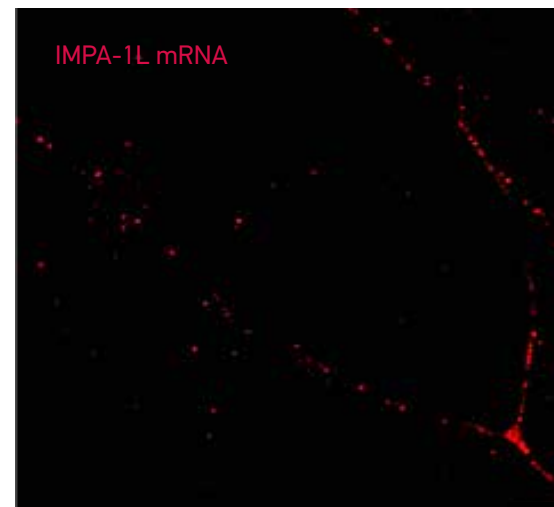
Rapid, sensitive and specific detection of chromosomal DNA sequences

- **Validated LNA™ probes** for human satellite-2 repeats, telomeres and centromere alpha-satellite sequences
- **Custom LNA™ probes** - designed by Exiqon's LNA™ experts
- **Short hybridization time** (< 1 hour)
- **Multiplexing** - range of labels

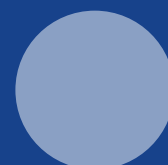
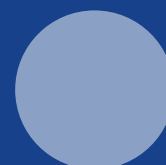
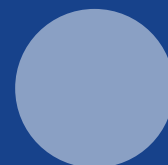
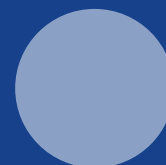
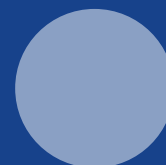
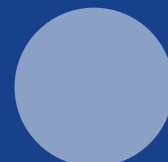
LNA™ FISH Probes for Cytogenetics

Learn more

exiqon.com/dna-ish-research



Detection of mRNA granules in subcellular compartments of rat primary neurons



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