

## LNA™ SNP Detection

### ELISA-like Multi-well plates and LNA™ probe-based SNP detection in PCR amplicons

**Orum *et al.*** Detection of the factor V Leiden mutation by direct allele-specific hybridization of PCR amplicons to photoimmobilized locked nucleic acids. Clin. Chem. 1999, 45: 1898-905. PMID: [10545058](#)

**Jacobsen *et al.*** Genotyping of the apolipoprotein BR3500Q mutation using immobilized locked nucleic acid capture probes. Clin. Chem. 2002, 48: 657-60. PMID: [11901069](#)

**Jacobsen *et al.*** LNA-enhanced detection of single nucleotide polymorphisms in the apolipoprotein E. Nucleic Acids Res. 2002, 30: e100. PMID: [12364617](#)

### LNA™ probe-based SNP detection using a fluorescent polarization-based detection method

**Simeonov & Nikiforov.** Single nucleotide polymorphism genotyping using short, fluorescently labeled locked nucleic acid (LNA) probes and fluorescence polarization detection. Nucleic Acids Res. 2002, 30: e91. PMID: [12202779](#)

### LNA™ microarray-based SNP detection

**Choleva *et al.*** Multiplex SNP genotyping using Locked Nucleic Acid and microfluidics. J. Assoc. Lab Autom. 2001, 6: 92-7.

**Mouritzen *et al.*** Single nucleotide polymorphism genotyping using locked nucleic acid (LNA). Expert Rev. Mol. Diagn. 2003, 3: 27-38. PMID: [12528362](#)

**Michikawa *et al.*** Visible Genotype Sensor Array. Sensors 2008, 8: 2722-35.

### PCR-based SNP detection using 3' ultimate LNA™ or 3' penultimate LNA™ primers

**Choleva *et al.*** Multiplex SNP genotyping using Locked Nucleic Acid and microfluidics. J. Assoc. Lab Autom. 2001, 6: 92-7.

**Latorra *et al.*** Enhanced allele-specific PCR discrimination in SNP genotyping using 3' locked nucleic acid (LNA) primers. Hum. Mutat. 2003, 22: 79-85. PMID: [12815597](#)

**Di Giusto & King.** Strong positional preference in the interaction of LNA oligonucleotides with DNA polymerase and proofreading exonuclease activities: implications for genotyping assays. Nucleic Acids Res. 2004, 32: e32. PMID: [14973328](#)

**Rupp *et al.*** Single-nucleotide-polymorphism-specific PCR for quantification and discrimination of Chlamydia pneumoniae genotypes by use of a 'locked' nucleic acid. Appl. Environ. Microbiol. 2006, 72: 3785-7. PMID: [16672536](#)



#### LNA™ probes in real-time qPCR detection of SNPs

**Johnson *et al.*** Locked nucleic acid (LNA) single nucleotide polymorphism (SNP) genotype analysis and validation using real-time PCR. *Nucleic Acids Res.* 2004, 32: e55. PMID: [15047860](#)

**Ugozzoli *et al.*** Real-time genotyping with oligonucleotide probes containing locked nucleic acids. *Anal. Biochem.* 2004, 324: 143-52. PMID: [14654057](#)

**Grannemann *et al.*** LightTyper assay with locked-nucleic-acid-modified oligomers for genotyping of the toll-like receptor 4 polymorphisms A896G and C1196T. *Clin. Chem.* 2005, 51: 1523-5. PMID: [16040849](#)

#### LNA™ clamps in minor mutant detection

**Hu *et al.*** Detection of K-ras mutations in azoxymethane-induced aberrant crypt foci in mice using LNA-mediated real-time PCR clamping and mutant-specific probes. *Mutat Res.* 2009, 677: 27-32. PMID: [19442760](#)

**Senescau *et al.*** Use of a locked-nucleic-acid oligomer in the clamped-probe assay for detection of a minority Pfcrt K76T mutant population of *Plasmodium falciparum*. *J. Clin. Microbiol.* 43: 3304-8. PMID: [16000452](#)

**Ren *et al.*** Rapid and sensitive detection of hepatitis B virus 1762T/1764A double mutation from hepatocellular carcinomas using LNA-mediated PCR clamping and hybridization probes. *J. Virol. Meth.* 2009, 158: 24-9. PMID: [19187787](#)

#### General LNA™ design

**You *et al.*** Design of LNA probes that improve mismatch discrimination. *Nucleic Acids Res.* 2006, 34: e60. PMID: [16670427](#)

**McTigue *et al.*** Sequence-dependent thermodynamic parameters for locked nucleic acid (LNA)-DNA duplex formation. *Biochemistry* 2004, 43: 5388-405. PMID: [15122905](#)

**Levin *et al.*** Position-dependent effects of locked nucleic acid (LNA) on DNA sequencing and PCR primers. *Biochem. Nucleic Acids Res.* 2006, 34: e142. PMID: [17071964](#)

