Technologies

**Intercalating Nucleic Acid®**
PentaBase’s proprietary technology, Intercalating Nucleic Acid® (INA®), is a hydrophobic base analog that is incorporated into oligonucleotides without replacing any nucleotide in the oligonucleotide sequence. The integrated INA® enhances the stacking effect of the DNA helix, which increases affinity, sensitivity and specificity of the oligonucleotide.

**EasyBeacon™ and HydrolEasy™ probes**
PentaBase is offering high quality, dual-labelled INA® modified probes with a broad range of different fluorophores and quenchers. We offer two types of proprietary, dual-labelled probes for real-time PCR; EasyBeacon™ probes for end-point analysis and hydrolyzable HydrolEasy™ probes for qPCR with improved signal-to-noise ratio.

- Increased target specificity, sensitivity and affinity
- High multiplexing capacity
- Improved signal-to-noise ratio
- Simple design and temperature independent quenching

**BaseProbes™**
BaseProbes™ is a universal master mix comprising one to four qPCR probes. The system combines the versatility of SYBR™ Green type detection with the multiplex capacity of molecular probes.

- Multiplexible SYBR™ Green replacement
- Easy conversion from your current assays
- Enables real internal control
- Compatible with standard qPCR configurations
**BaseBlockers™**

BaseBlockers™ are short, INA® modified oligonucleotides showing tight and specific binding to their target sequence. They are particularly useful for detection of variants with low allele frequencies by blocking wildtype priming activity and removal of false positive signals.

- **High specificity** - minimal effect on variant sequence
- **Enhanced robustness** of assays
- **Removal of cross signaling**
- **Increased detection range**

**SuPrimers™**

SuPrimers™ are DNA primers modified with our INA® technology and are compatible with nearly all PCR applications. SuPrimers™ are applicable with standard reagents and all PCR platforms.

- **Increased affinity**, facilitating shorter primer design
- **Highly specific** priming
- **Reduced primer-dimer formation**
- **Support higher on-target portion** of oligo

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**PentaBase**

PentaBase is a knowledge-based, ISO-certified real-time PCR focused company from 2006 founded and managed by researchers in Denmark. We have local **in-house** production of custom oligonucleotides based on our own proprietary DNA chemistry, known as Intercalating Nucleic Acid (INA®). We specialize in manufacturing of real-time PCR probes for IVD companies and development of **in vitro** diagnostic assays for real-time PCR with focus on detection of somatic mutations in cancer. For more than 10 years, we have created products for researchers and medical professionals exploring new treatments and helping patients worldwide.

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More information at www.pentabase.com