SOLIS BIODYNE

INNOVATION POWERED **BY NATURE**

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HOT SolisAcura™ Exo(-) DNA Polymerase

Novel DNA polymerase with exceptional accuracy, mismatch discrimination and inhibitor tolerance

Highly accurate polymerase for mismatch discrimination

Fast polymerization speed

10-15X higher fidelity compared to regular Taq

The **HOT SolisAcura™ Exo(-) DNA Polymerase** is designed for superior SNP detection and allele discrimination.

The polymerase enables recognition of misaligned nucleotides at the 3' end of primers, resulting in highly specific extension and improved allelic discrimination. With 10–15× higher fidelity than wild-type *Taq* polymerase, the enzyme ensures more accurate nucleotide incorporation and reduced non-specific amplification.

"Exo(-)" in the name refers to the enzyme lacking 5' → 3' exonuclease activity, nor does it have the 3' → 5' proofreading activity.

The novel **HOT SolisAcura™ Exo(-) DNA polymerase** is also engineered for enhanced synthesis rates and is inherently inhibitor tolerant, ensuring excellent performance with crude or challenging samples. The incorporated chemical hot-start mechanism further increases specificity and accuracy by preventing mispriming and non-specific primer extension.

SolisAcura™ Exo(-)

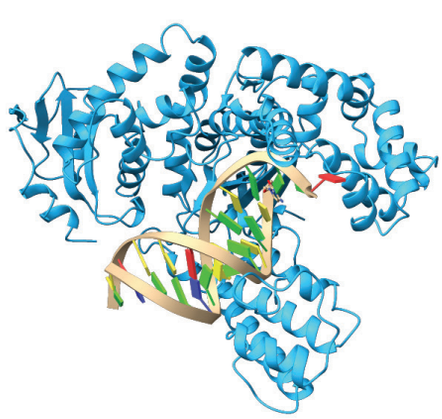

Figure 1. Model of HOT SolisAcura™ Exo(-) DNA Polymerase around DNA.

Features

- **Increased fidelity** of 10-15X compared to wild-type *Taq*
- **Superior mismatch discrimination** at the 3' end of primers
- Fast polymerization speed
- Compatible with FRET cassettes
- Inherently stable due to proprietary **Stability TAG** technology
- Manufactured in compliance with ISO 13485

We also have Exo(+) version of this enzyme available!

Superior mismatch discrimination allows for allele-specific solutions

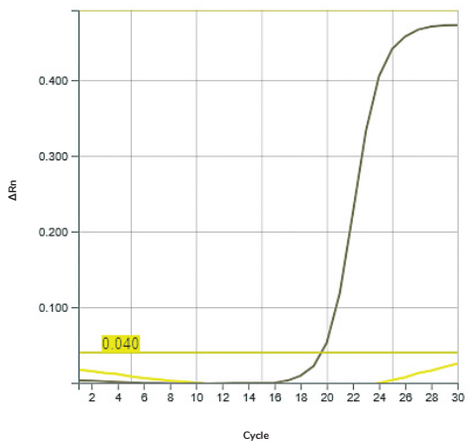

Figure 2. Amplification plot for the in-house negative control system using corn gDNA for the detection of C/T nucleotide of the SNP. Yellow amplification curve demonstrates mismatch while gray demonstrates perfect match.

Accurate genotype calls and well-defined clustering

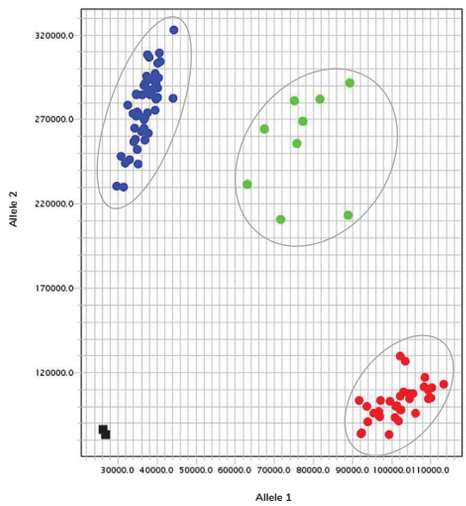

Figure 3. Allelic discrimination plot for the in-house SNP detection assay using maize gDNA. Formed clusters are distinct with accurate genotype calls. Blue dots correspond to homozygous for allele 2, green dots for heterozygous for allele 1/allele 2 and red dots for homozygous for allele 1. HOT SolisAcura™ Cassette-Based Genotyping Mix, which includes the **HOT SolisAcura™ Exo(-) DNA Polymerase**, was used in this assay.

The features of this enzyme support widespread usage in various applications:

- SNP genotyping
- Allele-specific PCR (AS-PCR)
- Pharmacogenetics, rare disease detection, oncology
- Agrigenomics (plant breeding, genomic selection, genetic diversity analysis)
- Veterinary testing (genetic disease screening, SNP detection) and livestock/animal genomics
- High-throughput screening
- Workflows using crude and challenging / inhibitor-rich samples

For high-throughput screening, check out the convenient cassette-based mastermix format!

Searching for an option compatible with hydrolysis probes? Discover SolisAcura™ Probe Genotyping qPCR Mix

Ordering information

Bulk solutions available!

Product	CAT. NO.	Size	Read more
HOT SolisAcuraT™ Exo(-) DNA Polymerase Kit	01-18-KIT-0000S (sample) 01-18-KIT-00500 01-18-KIT-01000	250 U (sample) 500 U 1000 U	

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For further details and ordering please contact **orders@solisbiodyne.com**

Request a FREE SAMPLE!