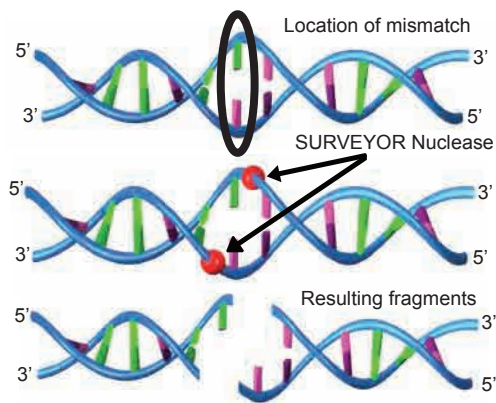


SURVEYOR® Mutation Detection Kit Standard Gel Electrophoresis

Discover and Detect All Types of Genetic Variations

SURVEYOR Mutation Detection Kits provide a simple, accurate and cost-effective means to scan DNA fragments for mutations with unmatched sensitivity and specificity.

Complete Mutation Detection System: Contains SURVEYOR Nuclease, all reagents and plasmid controls.

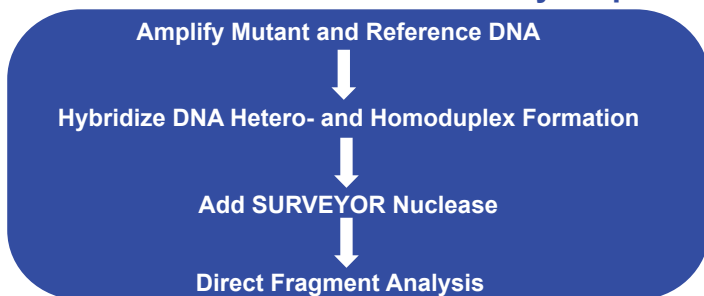


SURVEYOR Nuclease is a mismatch-specific endonuclease that recognizes mismatches in heteroduplexed DNA and cleaves both strands on the 3' side of the mismatch providing specific information on mutation location, orientation and type.

Designed for Multiple Mutation Discovery Applications

- Somatic, germ-line and mitochondrial mutations
- Insertions, deletions, substitutions and SNPs
- Low-copy mutations and pooled DNA samples

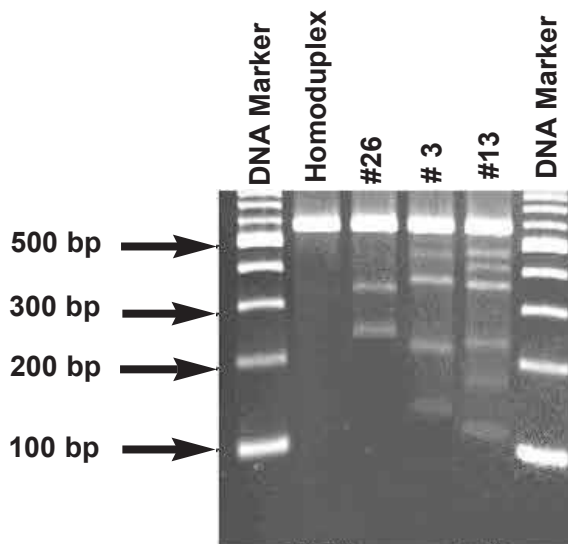
Mutation Detection in Four Easy Steps



Benefits

- **Determines mutation loci**
- **Saves time and money**
 - Streamlines DNA sequencing
 - Decreases sequencing backlog and analysis time
 - Validates sequencing results and analysis
 - Decreases chromatogram analysis by 90%
- **No post-PCR or post-reaction clean-up**
- **High throughput sensitivity and specificity**

Figure 1. Agarose (2.5%) gel electrophoresis of fragments generated by digestion of 160 ng of DNA with 1 µl of SURVEYOR Nuclease S at 42°C for 20 min. Analysis of 75% of the digested DNA was performed. The 584-bp amplicons were PCR amplified with Optimase Polymerase from one wild-type reference and three mutant genes. The mutants had one (T>C; fragments were 242 + 342 bp long), two (A>G and T>C; fragments were 135 + 449 bp and 220 + 364 bp long), and three (single-base deletion, T>C and C>A; fragments were 120 + 464 bp, 170 + 414 bp, and 226 + 358 bp long) mutations. A 100-bp ladder was run as a sizing standard. The gel was stained with ethidium bromide, illuminated with a UV transilluminator, and photographed.



SURVEYOR Mutation Detection Kit Components – All Optimized to Work Together

- SURVEYOR Nuclease S
- SURVEYOR Nuclease Enhancer S
- Stop Solution
- Control Plasmids and Primers

Products

SURVEYOR Mutation Detection Kit for Standard Gel Electrophoresis

Quantity	Catalog No.
25 reactions	706025
100 reactions	706020

Related Products

Mutation detection performance and sensitivity of the SURVEYOR Mutation Detection Kits are significantly enhanced by using a proofreading thermostable DNA polymerase for the PCR step. Optimase® Polymerase, available from Transgenomic, was used to develop the optimized protocols for these kits.

	Catalog No.	Quantity
Optimase Polymerase with dNTPs	SP2024	100 units

SURVEYOR Mutation Detection Kits are available for other platforms. Visit transgenomic.com for more information.

Shipping and Storage

SURVEYOR products are shipped frozen. Store product at -20° C in a non-frost-free freezer. Enzyme is guaranteed for a period of 6 months if stored as directed.

Quality Control

Every component has met Transgenomic quality control standards. Refer to the *Certificate of Analysis* for details.

Selected References

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4. **A rapid and sensitive enzymatic method for epidermal growth factor receptor mutation screening.** Janne, P.A., Borras, A.M., Kuang, Y., Rogers, A.M., Joshi, V.A., Liyanage, H., Lindeman, N., Lee, J.C., Halmos, B., Maher, E.A., Distel, R.J., Meyerson, M., Johnson, B.E. *Clin. Cancer Res.* 12, 751-758. (2006).
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Corporate Headquarters

Transgenomic, Inc.
12325 Emmet Street
Omaha, NE 68164, USA
Phone: (888) 233-9283 • (402) 452-5400
Fax: (402) 452-5401
Email: info@transgenomic.com

Transgenomic Limited
40 Watt Road, Hillington Park
Glasgow G52 4RY, UK
Phone: +44 (0) 141 892 8800
Fax: +44 (0) 141 883 5967
Email: sales@transgenomic.com



www.transgenomic.com

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