



# KRAS StripAssays®

Identify the most relevant mutations in the *KRAS* gene to optimize colorectal cancer therapies

### Metastatic colorectal cancer Assays. Key to the best therapy.

Modern cancer therapies can efficiently combat metastatic colorectal cancer. The best results are achieved when a specific type of cancer is matched with its appropriate therapy. For metastatic colorectal cancer monoclonal antibody therapies targeting EGFR (such as cetuximab and panitumumab) work exceptionally well in many cases. But not in all.

Certain mutations in the *KRAS* gene prevent therapeutic success of therapies which are directed to EGFR.

Epidermal Growth Factor (EGF) activates cell proliferation by binding to the EGF-Receptor (EGFR). This triggers a signal transduction pathway that includes the KRAS protein. Inhibiting the EGFR with monoclonal antibodies prevents the activation of the relevant signal transduction right at the start of the pathway. However, it only works if other parts of that pathway are not permanently activated regardless of the EGF-signal. Mutations in KRAS can cause this kind of activation that renders anti-EGFR therapies ineffective.

## ViennaLab's KRAS StripAssays® identify the most relevant mutations in the KRAS gene and thus allow for a more efficient therapy.

Cancer	Target	Therapeutic	Oncogene	Outcome	
Metastatic colorectal	EGFR	Cetuximab	KRAS wildtype	Tumor remission	
cancer		Panitumumab	KRAS mutated	Tumor progression	

**The Assay** 



### ViennaLab's KRAS StripAssays® meet customer requirements

Requirement	ViennaLab's offer
Easy	Three simple steps. 6 h. Done.
Reliable	Can be automated. Probes for mutations and controls combined on one teststrip.
Sensitive	At least 1% mutated alleles will be detected.
Affordable	Reagents. Thermocycler. Incubator. That is all you need. Software is optional.

Mutations detected	Codon 12					Codon 13		Codon 61					
	Ala	Arg	Asp	Cys	lle	Leu	Ser	Val	Asp	Cys	Arg	His	Leu
KRAS StripAssay® 5-590	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
KRAS 12/13/61 StripAssay® 5-690	✓	✓	✓	✓	✓	✓	✓	✓	<b>✓</b>	✓	✓	✓	<b>✓</b>

#### ViennaLab's KRAS StripAssays®

- Simple protocol for complex diagnostic questions
- Manual or automated processing
- No expensive lab equipment required
- Ready-to-use reagents
- CE-labelled kits

	Requirement		
1. Amplification: Multiplex PCR. Simultaneous biotin-labeling	Thermocycler		
2. Hybridization: Directly on the StripAssay® teststrips	Incubator		
3. Identification: Labeled products detected by streptavidin-alkaline phosphatase	Naked eye or scanner & software		

Cat.no.: KRAS StripAssay® 5-590 (20 tests/kit) KRAS 12/13/61 StripAssay® 5-690 (20 tests/kit)

ViennaLab offers StripAssays® for a wide range of diagnostic applications. Visit www.viennalab.com

Manufacturer:

ViennaLab Diagnostics GmbH Gaudenzdorfer Gürtel 43–45 A-1120 Vienna, Austria Phone: (+43-1) 8120156-0 Fax: (+43-1) 8120156-19

info@viennalab.com



