#### **Our Technology**

Nanosens Innovations Inc. will bring you the *CRISPR-chip* technology with a highly intuitive graphical user interface customized per application, commercial scalability (from 1 handheld measurement to a high thoughput lab robot screening version), and built-in efficient signal and software analysis.

CRISPR-Chip's ultrasensitive graphene biosensor (Powered by Cardea) allows you to assess the quality of your gRNAs for your CRISPR needs.



#### **QC** Applications

Reduce the time and costs necessary to take your CRISPR application from *target identification* to *hybridization* and *cleavage*.

Find the most appropriate guide RNAs and Cas versions for your gene therapy needs.

#### Nanosens Innovations Inc.

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What are your CRISPR Quality Control (QC) needs and what kind of potential solutions will be avaliable?

## **Basic QC Kit**

The basic kit determines binding and cleavage efficiency of guide RNA at the target site in chromatin free DNA.

Highly sensitive and specific for guide RNA validation.

Use 10 times less Cas9 than the gel electrophoresis it replaced.

Input: Nucleosome free DNA (Preferably Amplicon)

### gRNA Select Kit

The intermediate kit allow you to select the best guide RNA candidate, high on-target efficiency with low or no off-target cleavage, in chromatin.

Simple	Minimal sample preparation
Informative	Binding and cleavage kinetics; higher frequency on-site modification in vivo
Cost-effective	Indications prior to off-target cleavage by NGS
Fast	Same day results
Flexible	Assess the efficiency of different Cas9 mutants or nucleases
Input: Whole	DNA in chromatin state

# **Off-target Test Kit**

This advanced kit is for those who wish to specifically map out the locations of potential off-target hits in their CRISPR experiments, in case precision gene-edits are needed.

Get confidence that your guide RNAs and CRISPR work is not creating off-target edits.

Specific	Drastically increase specificity with equivalent sensitivity
Universal	Applicable to multiple cell types
Usability	Graphical User Interface is user-friendly and linear

Input: Whole DNA in chromatin state

