## Our Technology

Nanosens Innovations Inc. brings you the *CRISPR g-chip* device with a highly intuitive graphical user interface, commercial scalability, and highly efficient analysis with minimal noise.

Utilizes an ultrasensitive graphene biosensor technology to assess the quality of your guide RNAs for your CRISPR needs.

A simple two step process with the portable, hand-held device allows robust and specific quality control of your guides' binding efficiency and cleavage.
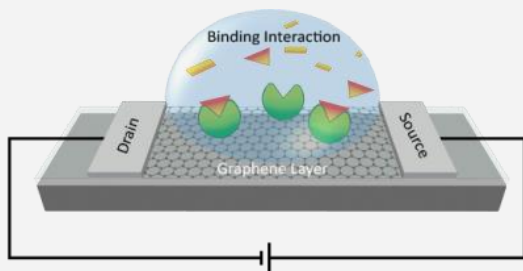
Applications

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

Find the most appropriate guide RNAs for your gene therapy needs.
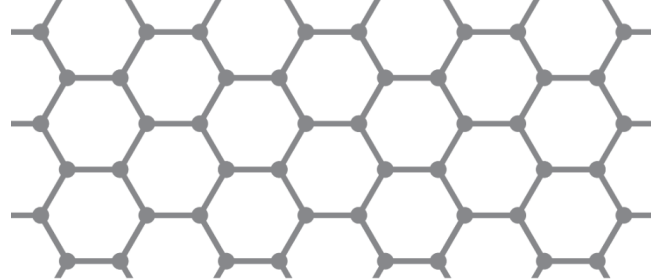
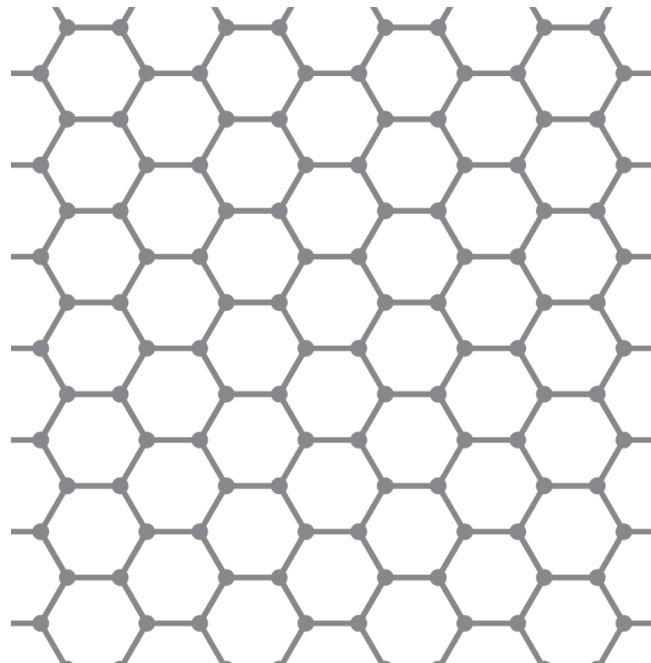Nanosens Innovations Inc.
nanosens.com

Office Address
9640 Towne Center Dr #100
San Diego CA, 92121

Mailing Address
8861 Villa La Jolla Dr. #13205
La Jolla, CA, 92039

NANOSENS

What are your CRISPR Quality Control needs?

Basic 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)

Intermediate 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

Advanced Kit

The advanced kit is best for those who wish to specifically map the locations of off target binding by sequencing.

Higher confidence of your guide RNAs in effective CRISPR applications with off-target identification.

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

Figure 1

Detection time: 5 min

Score
BRNA 1:
BRNA 2:
BRNA 3:

DNA Sample

Cartridge

CRISPR-dCas9 complex

Target Gene

DNA Sample

gRNA

dCAS9-Ghraphene Linker Molecule

Graphene-based Field Effect Transistor

Graphene Channel