Accurately Assess Cas9 Activity in Cells

• Measure functional activity of Cas9 nuclease, dCas9-repressor, or dCas9-activator in any cell line
• Obtain quantitative FACS-based read-outs
• Get complete, easy-to-use kits with ready-to-transduce lentiviral particles

The CRISPR-Test assay kits contain a mix of lentiviral particles with both green fluorescent and red fluorescent protein (GFP and RFP). The GFP fluorescent marker responds to the specific Cas9 activity the Kit measures, whether nuclease (CRISPRu or CRISPR KO), gene repression (CRISPRi), or gene activation (CRISPRa); while the RFP fluorescence provides a normalization control.

Measure Cas9 for CRISPR knockout, CRISPRa, or CRISPRi

1. Transduce your test population of putative Cas9, or dCas9-activator, or dCas9-repressor cells.
2. Determine by flow cytometry the ratio of green to red fluorescent cells.
3. After 4-6 days, measure the ratio of green to red fluorescent cells again.
4. Cas9 activity correlates with the difference in green vs. red cells.

How Does it Work?

CRISPRuTest™ Universal Cas9 Nuclease Assay Kit (cat. # CRUTEST)—Measure Cas9 nuclease activity in any mammalian cell system.

CRISPRaTest™ dCas9-Activator Assay Kit (cat. # CRATTEST) —Measure the transcriptional activator efficacy of any of the several dCas9-activator variants used for the CRISPRa system, including dCas9-VP64, dCas-Rta, Cellecta’s dCas9-VPH.

CRISPRiTest™ dCas9-Repressor Assay Kit (cat. # CRITTEST) —Measure the transcriptional repressor function of any dCas9-repressor fusion, such as dCas9-KRAB.

Combination Kits: CRISPR-Test Assay and Cas9 with 4 Different Promoters

To find the optimal Cas9 or dCas9 repressor or activator construct for your cell system, Cellecta offers a combination of four Cas9 expression constructs at a reduced price when purchased in conjunction with one of the CRISPR-Test Assays.

CRISPRuTest™ dCas9 Assay (cat. # CRUTP-SET) with 10^6 TU of each of the following:
- CMV-Cas9-Puro
- RSV-Cas9-Puro
- EFS-Cas9-Puro
- SFFV-Cas9-Puro

CRISPRaTest™ dCas9-Repressor Assay (cat. # CRITP-SET) with 10^6 TU of each of the following:
- CMV-dCas9-KRAB-Puro
- RSV-dCas9-KRAB-Puro
- EFS-dCas9-KRAB-Puro
- SFFV-dCas9-KRAB-Puro

CRISPRaTest™ dCas9-Activator Assay (cat. # CRATP-SET) with 10^6 TU of each of the following:
- CMV-dCas9-VPH-Puro
- RSV-dCas9-VPH-Puro
- EFS-dCas9-VPH-Puro
- SFFV-dCas9-VPH-Puro

Ordering information

Catalog #  Product Description
CRUTEST  CRISPRuTest™ Functional Cas9 Nuclease Activity Assay Kit
CRATEST  CRISPRaTest™ Functional dCas9-Activator Assay Kit
CRITEST  CRISPRiTest™ Functional dCas9-Repressor Assay Kit Cas9
CRUTP-SET CRISPRuTest™ dCas9 Assay with 10^6 TU of 4 Cas9 Constructs
CRITP-SET CRISPRiTest™ dCas9-Repressor Assay with 10^6 TU of 4 dCas9-Repressor Constructs
CRATP-SET CRISPRaTest™ dCas9-Activator Assay with 10^6 TU of 4 dCas9-Activator Constructs

For more information on these or other Cellecta products and services, email us at info@cellecta.com.