

## Datasheet for HeLa/dCas9-BFP-KRAB Cell Line

**Catalog number:** SL550176

**Product:** HeLa cell line stably expressing CRISPR dCas9 and KRAB

**Description:** This product is a cell line stably expressing the catalytically inactive, HA-tagged dCas9 nuclease fused to blue fluorescent protein (BFP) and the transcriptional repression domain Krüppel associated box (KRAB). This cell line also contains blasticidin resistance gene. The target guide RNAs can be transfected or transduced in the cell line to repress the gene transcription.

**Quantity:** 1 vial of  $2 \times 10^6$  cells; frozen

**Shipping conditions:** Dry ice

**Storage conditions:** Liquid nitrogen vapor phase. Remove the item from the dry ice packaging and check all items for damage and leakage. Place immediately into storage at or below  $-140^{\circ}\text{C}$ , preferably into the liquid nitrogen vapor phase, until use.

**Source of parental line:**

HeLa  
Organism: Homo sapiens, human  
Tissue: cervix adenocarcinoma  
Cell type: epithelial

**Safety instructions:** To ensure safety, protective gloves, clothing, and a face mask should be worn when handling frozen vials. Some leakage of liquid nitrogen into the vial may occur during storage. The liquid nitrogen will be converted to gas upon thawing. Due to the nature of nitrogen gas, pressure may build within the vial and possibly result in the vial exploding or losing its cap. This may cause flying debris.

**Thawing procedure:** The vial of cells should be thawed in a  $37^{\circ}\text{C}$  water bath with gentle agitation. For optimal performance, the vial should be thawed in under two minutes. Ensure that the cap of the vial did not loosen upon thawing, and re-tighten as needed. Spray the vial with 70% EtOH and wipe off. Repeat. Using aseptic technique, add the contents of the vial to 9ml of complete growth medium (without selection). Centrifuge for 5min at 125xg. Aspirate the medium, being careful not to disturb the pellet. Re-suspend in 10mL of complete growth medium, and place into a culture vessel of your choice. Only add selection to the medium after 24 hours in culture.

### **Complete Growth Medium**

The base medium for this cell line is DMEM. For optimal growth and maintenance of selection, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.

### **Selection**

Blasticidin to a final concentration of 8 ug/mL

### **Culture temperature:**

37°C with 5% CO<sub>2</sub>

### **Subculture:**

Rinse the cells with PBS without cations, digest cells with 0.25% (w/v) Trypsin-EDTA (0.53mM) solution and split at 1:6 to 1:10 ratio.

**Cryopreservation:** Freeze slowly in complete growth medium supplemented with 5% (v/v) DMSO.

**Quality control:** The genome integration, expression levels of dCas9-BFP-KRAB, and the transcription repression of target genes using the cell line have been verified by qPCR. All other QC specifications have also been met. For detailed information, please refer to the certificate of analysis.

**Citation of product:** If use of this item results in a publication, please use this information:  
CRISPR stable cell line HeLa/dCas9-BFP-KRAB (SL550176, OriGene Technologies Inc., Rockville, MD).

**Limited Use License**

A limited use license is granted to the Buyer of the Product. The Product shall be used by the Buyer for internal research purposes only. The Product is expressly not designed, intended, or warranted for use in humans or for therapeutic or diagnostic use. The Product must not be resold, repackaged or modified for resale, or used to manufacture commercial products without prior written consent from OriGene. This Product should be used in accordance with NIH guidelines developed for recombinant DNA and genetic research. Use of any part of the Product constitutes acceptance of the above terms.