

## **Cas9 Stable Cell Line for CRISPR (293T, inducible)**

**Catalog # C0008**

**For in vitro use only**

### **Description**

The recombinant, flag-tagged Cas9 (humanized *S. pyogenes* Cas9) is inducibly expressed in 293T in a tetracycline-dependent (0.1-1 $\mu$ g/mL) manner. This cell line is also **G418 and puromycin (1 $\mu$ g/mL)** resistant.

### **Background**

CRISPR, the Clustered Regularly Interspaced Short Palindromic Repeats, is currently the most commonly used technology for genome editing. There are two distinct components in this system: a guide RNA and an RNA-guided DNA nuclease, Cas9 (CRISPR associated protein 9). When these two components are expressed together in the same cells, the genomic sequence targeted by the gRNA will be edited (modified or permanently disrupted).

Given the immediate availability of mouse and human lentiviral CRISPR gRNA libraries, CRISPR technology has tremendously benefitted the scientific community in both academia and industry. Humimmu is now providing tetracycline inducible Cas9 expressing cell lines of a variety of tissue origin to further facilitate high-throughput, CRISPR based genome-wide screening.

### **Host Cell**

293T cells

### **Contents**

1 vial contains > 2 x 10<sup>6</sup> cells in freezing medium.

**IMPORTANT:** Cells are shipped frozen. If cells are not frozen upon arrival, contact Humimmu immediately.

### **Thawing of Frozen Cells**

1. Upon receipt of the frozen cells, it is recommended to thaw the cells and initiate the culture immediately in order to retain the highest cell viability.

2. To thaw the cells, put the vial in 37°C water bath with gentle agitation for ~1min. Keep the cap out of water to minimize the risk of contamination.
3. Pipette the cells into a 15ml conical tube with ~5ml fresh culture medium.
4. Centrifuge at 1000rpm (~220g) for 5min under room temp.
5. Remove the supernatant and resuspend the cells in fresh culture medium
6. Transfer the cells into new tissue culture flasks and move them to 37°C incubator (5% CO<sub>2</sub>) for continuous culture.

**Safety Precaution:** *it is highly recommended that protective gloves and clothing should be used when handling frozen vials.*

### Standard Culture Procedure

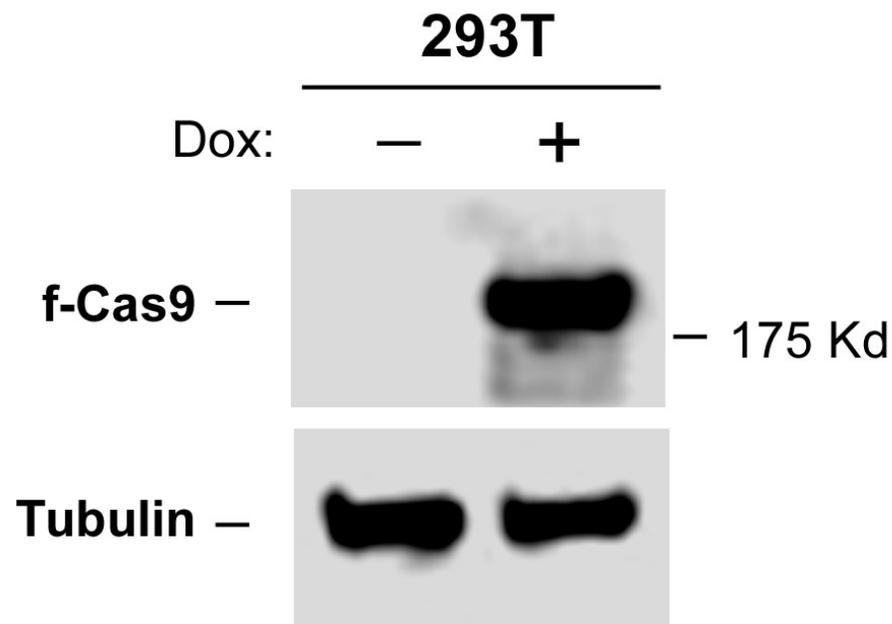
1. Cells should be maintained in the complete culture medium until reaching ~80-90% confluence. **Note:** *Never let the cells to become over confluent.*
2. Add ~2.5ml of 0.25% Trypsin-EDTA to the flask and incubate for 5min at 37°C.
3. Neutralize the enzyme activity by adding 2-3 volumes of fresh complete culture medium.
4. Centrifuge 1000rpm (~220g) for 5min and resuspend the cells in desired volume of medium.
5. Transfer the cells to a new tissue culture treated flask for subculture.

**Note:** It is recommended that cells are passaged at the ratio of 1:10.

### Complete Growth Medium

DMEM + 10% FBS + Antibiotics

### Quality Assurance



## **Product Warranty**

Humimmu warrants that cells shall be viable upon shipment from Humimmu for a period of a month, provided they have been properly stored and handled during this period.

## **USE RESTRICTIONS**

These cells are distributed for research purposes only. This product is covered by a Limited Use License. By use of this product, the buyer agrees the terms and conditions of all applicable Limited Use Label Licenses. For non-research use, such as screening, quality control or clinical development, contact [info@humimmu.com](mailto:info@humimmu.com).

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