

eLUCidate™



Luciferase Reporter Cell Lines

Cat. No.	Content	Amount
EL-TNFA293	eLUCidate™ HEK 293, TNF- α Reporter Cell Line	2-3 x 10 ⁶ cells in 1 ml 90% FBS, 10% DMSO

Shipping	Dry ice
Storage	Liquid nitrogen

RELATED PRODUCTS	Catalog #
eLUCidate™ RAW 264.7, NF- κ B Reporter Cell Line	EL-NFKBRAW
eLUCidate™ RAW 264.7, IL-8 Reporter Cell Line	EL-IL8RAW
eLUCidate™ HEK 293, AP-1 Reporter Cell Line	EL-AP1293
eLUCidate™ HEK 293, MIP-2 Reporter Cell Line	EL-MIP2293
eLUCidate™ RAW 264.7, MIP-2 Reporter Cell Line	EL-MIP2RAW
eLUCidate™ RAW 264.7, TNF- α Reporter Cell Line	EL-TNFARAW
eLUCidate™ HEK 293, TNF- β Reporter Cell Line	EL-TNFB293
eLUCidate™ RAW 264.7, TNF- β Reporter Cell Line	EL-TNFBRAW
eLUCidate™ HEK 293, GATA3 Reporter Cell Line	EL-GATA3293
eLUCidate™ HEK 293, NFAT Reporter Cell Line	EL-NFAT293
eLUCidate™ RAW 264.7, NFAT Reporter Cell Line	EL-NFATRAW
eLUCidate™ HeLa, STAT1 Reporter Cell Line	EL-STAT1HELA
eLUCidate™ HEK 293, STAT1 Reporter Cell Line	EL-STAT1293
eLUCidate™ RAW 264.7, STAT1 Reporter Cell Line	EL-STAT1RAW
eLUCidate™ HEK 293, STAT3 Reporter Cell Line	EL-STAT3293
eLUCidate™ RAW 264.7, iNOS Reporter Cell Line	EL-INOSRAW
eLUCidate™ NIH-3T3, IL-6 Reporter Cell Line	EL-IL63T3
eLUCidate™ MCF7, Nrf2 Reporter Cell Line	EL-NRF2MCF7
eLUCidate™ HeLa, HRE Reporter Cell Line	EL-HREHELA
eLUCidate™ HEK 293, TCF/LEF Reporter Cell Line	EL-LEF293T
eLUCidate™ HEK 293T, RIG-I Reporter Cell Line	EL-RIGI293T
eLUCidate™ HEK 293T, MDA5 Reporter Cell Line	EL-MDA5293T
eLUCidate™ HEK 293, TLR3/IFN β Reporter Cell Line	EL-IFNB293
eLUCidate™ HEK 293, TLR3/ISRE Reporter Cell Line	EL-ISRE293
eLUCidate™ HeLa, TLR4/IL-8 Reporter Cell Line	EL-IL8HELA
eLUCidate™ HEK 293, NF- κ B Reporter Cell Line	EL-NFKB293
eLUCidate™ HeLa, p53 Reporter Cell Line	EL-P53HELA
eLUCidate™ HEK 293, TLR2/NF- κ B Reporter Cell Line	EL-TLR2293
eLUCidate™ HEK 293, TLR3/NF- κ B Reporter Cell Line	EL-TLR3293
eLUCidate™ HEK 293, TLR7/NF- κ B Reporter Cell Line	EL-TLR7293
eLUCidate™ HEK 293, TLR8/NF- κ B Reporter Cell Line	EL-TLR8293
eLUCidate™ HEK 293, TLR9/NF- κ B Reporter Cell Line	EL-TLR9293
eLUCidate™ HEK 293, SRE Reporter Cell Line	EL-SRE293
eLUCidate™ HEK 293, SRF-RE Reporter Cell Line	EL-SRFRE293
eLUCidate™ HEK 293, CRE Reporter Cell Line	EL-CRE293

INTRODUCTION

The eLUCidate TNF- α reporter cell line is a stably transfected HEK 293 cell line which expresses Renilla luciferase reporter gene under the transcriptional control of the TNF- α promoter. Tumor necrosis factor-alpha (TNF- α) is one of the major proinflammatory cytokines and can induce systemic inflammation, apoptotic cell death, sepsis and cachexia. Dysregulation of TNF-alpha induction is often involved in various human diseases including inflammatory bowel disease, cancer and Alzheimer's disease. The eLUCidate TNF- α reporter cell line is tested by phorbol 12-myristate 13-acetate (PMA), and provides an effective way to monitor or screen for activators/inhibitors of the TNF- α signaling pathway.

MATERIALS AND METHODS

1. General Culture Conditions

Cells should be grown at 37°C with 5% CO₂ using **Growth Medium** (DMEM plus 10% FBS and 1% Pen/Strep). Where needed, add 3 μ g/ml Puromycin.

2. Thawing and Growing Cells

- 2.1 Aliquot 10 ml of Growth Medium to a 15 ml sterile tube.
- 2.2 Remove cells from storage and quickly thaw in a 37°C water bath.
- 2.3 Transfer cells to the tube in 2.1.
- 2.4 Spin cells down at 1,000 rpm for 10 minutes.
- 2.5 Resuspend cells in pre-warmed Growth Medium.
- 2.6 Transfer cells to a T25 flask (or equivalent) and culture at 37°C in a CO₂ incubator.
- 2.7 At first passage, transfer cells into Growth Medium with Puromycin.
- 2.8 Split cells when they reach about 80-90% confluence.

3. Cell Passaging

- 3.1 Detach cells using Detachin™ Cell Detachment Solution (Cat #: T100100).
- 3.2 Add 10 ml Growth Medium with Puromycin to cells and transfer to a sterile 50 ml centrifuge tube.
- 3.3 Pellet cells by centrifuging at 1,000 rpm for 10 min.
- 3.4 Resuspend cells in Growth Medium with Puromycin to achieve 1:10 or 1:20 dilution ratio, and plate as needed.

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