

# SureSilencing™ SilenciX Knockout Cell Lines

**HMG1L1 HeLa SilenciX**
**Catalog # SLX-00075**

## Description

<b>Lot #</b>	081016A
<b>Source</b>	Adherent HeLa cells silenced for HMG1L1 (Accession Number: NM_001008735)
<b>Formulation</b>	Cryo-preserved at passage 9

## Target Background

<b>Targeted Gene</b>	<b>HMG1L1</b>
<b>Source</b>	Homo sapiens
<b>Gene Name</b>	High-mobility group (non-histone chromosomal) protein 1 – like 1
<b>Gene Accession Number</b>	NM_001008735
<b>Protein Function</b>	This gene may represent an evolving retro-pseudogene of the high-mobility group box 1 gene, which has multiple pseudogenes. This gene has an intact open reading frame as well as strong transcriptional support. The length of encoded protein is conserved, compared to the high-mobility group box 1 protein. The exact function of this gene is unknown.

HMG1L1 presents 96% sequence homology with HMGB1 (NM\_002128).

**shRNA sequences targeting HMG1L1 can not discriminate between HMG1L1 and HMGB1 because of this high sequence homology. Therefore, the knock-down of HMG1L1 leads to the knock-down of HMGB1 (see real-time PCR data).**

## Quality Control

### **Contamination Analysis**

Tested free of bacterial contamination in antibiotic-free medium and tested free of mycoplasma with MycoAlert Mycoplasma Detection Kit (Lonza Inc, USA): Catalog Number LT07-318)

### **Silencing Validation by real-time PCR:**

Cell line	<b>HMG1L1 HeLa SilenciX</b>
HMG1L1 Silencing (%)	<b>93%</b>
HMGB1 Silencing (%)	<b>82%</b>

- Validation of HMG1L1 knock-down by real-time PCR in HMG1L1 HeLa SilenciX cells, in comparison with Control HeLa SilenciX cells, using the HMG1L1 primer set PPH57933A (SABiosciences).
- Validation of HMGB1 knock-down by real-time PCR in HMG1L1 HeLa SilenciX cells, in comparison with Control HeLa SilenciX cells, using the HMGB1 primer set PPH00999E (SABiosciences).

Relative PCR quantitation allows direct comparison of gene expression levels for housekeeping genes and the target gene of interest (GOI) in both control HeLa SilenciX cells and GOI HeLa SilenciX cells.

The difference between the  $C_t$  values ( $\Delta C_t$ ) for each gene is calculated:

$$\begin{aligned}\Delta C_t (\text{GOI HeLa SilenciX}) &= C_t (\text{GOI HeLa SilenciX}) - C_t (\text{Housekeeping gene}) \\ \Delta C_t (\text{control HeLa SilenciX}) &= C_t (\text{control HeLa SilenciX}) - C_t (\text{Housekeeping gene})\end{aligned}$$

The difference in  $\Delta C_t$  values ( $\Delta\Delta C_t$ ) is determined between the control HeLa SilenciX cells and the GOI HeLa SilenciX cells.

$$\Delta\Delta C_t = \Delta C_t (\text{GOI HeLa SilenciX}) - \Delta C_t (\text{control HeLa SilenciX})$$

The fold change in gene expression is obtained as follows:

$$\text{Fold Change} = 2^{-[\Delta C_t (\text{GOI HeLa SilenciX}) - \Delta C_t (\text{control HeLa SilenciX})]}$$

The level of GOI expression in control HeLa SilenciX is set to 1 and represents 100% GOI expression in the control HeLa SilenciX cell line. The level of silencing is expressed as percentage of GOI silencing:

$$\text{Percentage of GOI silencing} = 100 - (\text{fold change} \times 100)$$

## **Storage Conditions**

SureSilencing SilenciX Knockout cells are shipped on dry ice. For efficient and long-term storage, store this cell line properly in liquid nitrogen.

## **Usage Restrictions**

This product is intended for research purposes only and is not intended for diagnostic and clinical purposes or for Human applications. You are responsible for its safe storage, handling, and use.

SABiosciences and tebu-bio are not liable for any damages or injuries arising from receipt and/or use of this product.

It is strictly forbidden to:

- make the SilenciX cell lines available to any third party,
- transfer, sell, or distribute the silenced and the control cell lines, out of the laboratory,
- sub-license the silenced and the control cell lines,
- develop new cell lines using the SilenciX know-how,
- offer commercial services on SilenciX cell lines (silenced and control cell lines).

## **Technical Service**

For more information about the use of SureSilencing SilenciX Knockout cell lines, please contact technical support at: [Support@SABiosciences.com](mailto:Support@SABiosciences.com)

**MORE INFORMATION AT** [www.SABiosciences.com](http://www.SABiosciences.com)

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