



28660

## Bacterial Transformation Kit – 2 (with blue white screening) (Teaching)

Part E

### Specifications

Stability

The competent cells should be viable for three to six months from the date of manufacture when stored as instructed.

Activity

The Kit is tested to see competent cells of E.coli strain transformed as instructed in the protocol

### Other Information

Description

Transformation, a process central to recombinant DNA technology, is the process by which a foreign DNA is introduced into a bacterium. In this kit, the experiment employs a 3-5kb circular Plasmid DNA as the foreign DNA. The Plasmid contains genes of interest to us along with a selection markers (i.e., genes which confer antibiotic resistance). For Transformation to be successful, the recipient bacterium, called the Host, should first be made Competent for the uptake of DNA. This kit describes a simple procedure for the same. The Competent status, however, is not permanent and is lost eventually. In general, freshly made Competent cells provide high Transformation efficiency. The molecular mechanism for blue-white screening is based on the Lac Operon. The chemical required for this screening is X-Gal. It is the hydrolysis of X-Gal that causes the characteristic blue color.

Includes

Components	15 Experiments	30 Experiments
Host cells	1.0 ml	2.0 ml
Sterile LB medium	50.0 ml	60.0 ml
Sterile LB medium	10.0 ml	15.0 ml
Competent cells	3.0 ml	5.0 ml
Plasmid DNA (50 ng/mcl)	40.0 mcl	80.0 mcl
0.1M CaCl <sub>2</sub>	30.0 ml	60.0 ml
LB agar powde	18.0 g	36.0 g
Ampicillin	400 mg	800 mg
X-Gal (20mg/ml)	1.0 ml	2.0 ml
IPTG (200 mg/ml)	150 mcl	300 mcl
Sterile water	1.0 ml	2.0 ml

## General Information

Storage	Includes components ranging from RT to -20°C
Shelf Life	12 Months
IMDG Identification	Not Regulated for Transport (Non-Haz)
HSN Code	
15 expt. Kit	38229090 (GST 12%)
30 expt. Kit	38229090 (GST 12%)

## Available Packages

5 expt. Kit

---

15 expt. Kit

---

30 expt. Kit

---

---

### Disclaimer

The information represented here may/may not represent the entire product specification, application or protocol recommended by Sisco Research Laboratories Pvt. Ltd. (SRL). This information is for the user scientists or trading community as a guide in their applications. The company claims no liability for misuse resulting due to wrong usage of the information above. For actual batch related documents, mail us.

608-B, Satellite Gazebo, Andheri Ghatkopar Link Road, Chakala, Andheri (E), Mumbai - 400 099, Maharashtra, India. Telephone: +91-22-4268 5800, Email: info@srchem.com, website www.srchem.com

---