

SV40 Large T Antigen SV40 DNA Replication Assay Kit

SV40 Large T Antigen

Cat. No.	Size
E5800-01	20 µg
E5800-02	100 µg

Storage Conditions:
Store at -20°C

Note:

This product is functionally warranted only when used in conjunction with our SV40 DNA Replication Assay Kit, Cat. No. E8050, containing control DNA, reaction buffer and HeLa extract.

SV40 DNA Replication Assay Kit

Cat. No.	Size
E8050-01	1 kit (20 reactions)

Storage Conditions:
Store at -20°C

Note:

Contains HeLa cell extract, plasmids: pUC-HSO, pUC-8-4, reaction buffers, creatine phosphokinase, 20x dNTPs/NTPs, phosphocreatine, yeast RNA coprecipitant.

SV 40 Large T Antigen is also sold separately (Cat. No. E5800).

This kit complements our SV40 Large T Antigen.

Simply add SV40 Large T Antigen and you have a complete system for in vitro modeling of chromosomal DNA replication. This kit is sufficient for **20 reactions**.

The major regulatory protein of SV40 virus, responsible for virion assembly, viral and cellular transcriptional regulation, viral DNA replication, alteration of the cell cycle; it also functions as molecular chaperone.

Description:

- Simian virus (SV40) DNA system is the best model for mammalian chromosomal DNA replication in vitro (1). Addition of SV40 Large T Antigen initiates replication in the presence of host proteins (2).
- The SV40 DNA Replication System is ideal for:
 - › examining the fidelity and biochemistry of DNA replication in humans (3,4)
 - › identifying mode of action and mechanisms leading to cell transformation *in vitro* and tumor formation *in vivo* (5)
 - › regulating gene expression in eukaryotic cells (2)
 - › studying the inhibition of DNA replication by mutagenesis (6,7)
 - › determining the risks posed by human carcinogens
 - › comparing replication of normal and malignant cells
 - › investigating the cytotoxic effects of drugs (8)
 - › investigating apoptosis

Quality Control:

All preparations are assayed for stimulation of DNA synthesis in a T antigen-dependent DNA replication assay (2). Typical preparations are greater than 90% pure as judged by SDS polyacrylamide gel electrophoresis.

References:

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4. Boyer, J.C., Thomas, D.C., Maher, V.M., McCormick, J.J. and Kunkel, T.A. (1993) *Cancer Res.* 53, 3270-3275.
5. Bebenek, K., Thomas, D.C., Roberts, J.D., Eckstein, F. and Kunkel, T.A. (1993) *Mol. Pharm.* 43, 57-63.
6. Stillman, B. (1994) *Cell* 78, 725-728.
7. Fanning, E. (1992) *J. Virol.* 66, 1289-1293.
8. Dixon, R.A.F., and Nathans, D. (1985) *J. Virol.* 53, 1001-1004.