

### **PRODUCT INFORMATION**

# **Buffer Set for Restriction Endonucleases (with BSA)**

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Lot:		

Store at -20°C

BSA included

### www.thermoscientific.com/onebio

# **Description**

The buffer set for restriction endonucleases contains 1 ml of each B, G, O, R and Thermo Scientific Tango buffers.

**Supplied in 10X concentrated stocks.** 

# **1X Buffer B Composition**

10 mM Tris-HCl (pH 7.5 at 37°C), 10 mM MgCl<sub>2</sub>, 0.1 mg/ml BSA.

# **1X Buffer G Composition**

10 mM Tris-HCl (pH 7.5 at 37°C), 10 mM MgCl<sub>2</sub>, 50 mM NaCl, 0.1 mg/ml BSA.

# **1X Buffer O Composition**

50 mM Tris-HCl (pH 7.5 at 37°C), 10 mM MgCl<sub>2</sub>, 100 mM NaCl, 0.1 mg/ml BSA.

# **1X Buffer R Composition**

10 mM Tris-HCl (pH 8.5 at 37°C), 10 mM MgCl $_2$ , 100 mM KCl, 0.1 mg/ml BSA.

# 1X Buffer Tango<sup>™</sup> Composition

33 mM Tris-acetate (pH 7.9 at 37°C), 10 mM magnesium acetate, 66 mM potassium acetate, 0.1 mg/ml BSA.

### **CERTIFICATE OF ANALYSIS**

### **Functional Test**

Functionaly tested in DNA digestion with 15 randomly picked conventional restriction endonucleases. Digestion conditions are as described in activity assays of each enzyme. Reaction products analyzed by agarose electrophoresis and ethidium bromide staining. No change in digestion pattern is observed compared to previous lot.

# **Endo- and Exonucleases Assay**

Single stranded and double standed radiolabeled oligonucleotides are incubated with the 1X buffer at 37°C for 16 hours, separated on polyacrylamide gel and analyzed by phosphoimaging. No signs of radiolabeled oligo degradation is considered as the absence of endoand exonucleases activities.

# **Nicking Activities Assay**

Supercoiled pUC19 DNA is incubated with buffer at 37°C for 17 hours and analyzed by agarose electrophoresis and ethidium bromide staining. There is no linearised plasmid form and relaxation of supercoiled plasmid form compared to negative control.

**Quality authorized by:** 



### **Important Note**

This buffer contains BSA. In order to avoid the risk of bacterial growth, do not store buffer containing BSA at 4°C for periods longer than one week. If buffer is to be stored at 4°C it should be aliquoted into small portions and the main stock should be kept at -20°C.

#### **PRODUCT USE LIMITATION**

This product is developed, designed and sold exclusively *for research purposes and in vitro use only.* The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals. Please refer to <a href="https://www.thermoscientific.com/onebio">www.thermoscientific.com/onebio</a> for Material Safety Data Sheet of the product.

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