

10X TE buffer, pH 8.0

<u>Product Name</u> 10X TE buffer pH 8.0 Product Code ML012-100ML ML012-500 ML Kit Packing 100 ml 500 ml

Introduction: 10X TE Buffer, pH 8.0 is an extensively used buffer in Molecular Biology. Its principal application includes protection of DNA and RNA from degradation. The 10X buffer should be diluted to 1X before use.

Description: TE buffer, also called " $T_{10}E_1$ " Buffer or "T ten E one buffer", is composed of Tris, a buffering agent and EDTA, a chelating agent. EDTA prevents the degradation of DNA and RNA by chelating divalent metal ions which are required for nuclease activity. The Tris buffering agent and EDTA metal chelating properties help protect DNA and RNA. Based on nuclease studies the pH should be adjusted to 7.5 for RNA and 8.0 for DNA as the respective DNA and RNA nucleases are supposed to be less active at these pH values, but pH 8.0 can be used for storage of both DNA and RNA.

Application: TE buffer is mainly used in storing DNA. Genomic and plasmid DNA can be stored in TE Buffer at 4°C for short-term use, or -20°C to -80°C for long-term storage. Repeated freeze-thaw cycles should be avoided. Moreover, Tris-EDTA buffer disrupts protein cross-links and therefore is useful in unmasking antigens and epitopes in formalin-fixed and paraffin-embedded tissue sections. This buffer is also used in immuno-histochemical detection of some proteins as it enhances the staining intensity of antibodies.

Composition:

10X TE buffer, pH 8.0 consists of 100 mM Tris and 10 mM EDTA adjusted to pH 8.0. This buffer is supplied as 10X stock and should be diluted to 1X before use.

Properties:

| Appearance | : Colorless solution |
|------------------|---|
| Clarity | : Clear and free of particles |
| рH | : 7.98 - 8.02 |
| DNase & RNase | : None detected |
| Bioburden | : None detected |
| Suitability test | : This solution has been tested and is suitable for use in various Molecular Biolog |
| | applications. |

Storage conditions: 10X TE buffer, pH8.0 has to be stored at room temperature (15 - 25 °C).

Technical Assistance

At HiMedia we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance, mail at <u>mb@himedialabs.com</u>.

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Registered Office :

23, Vadhani Industrial Estate,LBS Marg, Mumbai - 400 086, India. Tel. : (022) 4017 9797 / 2500 1607 Fax : (022) 2500 2286 Commercial Office

A-516, Swastik Disha Business Park, Via Vadhani Indl. Est., LBS Marg, Mumbai - 400 086, India Tel: 00-91-22-6147 1919 Fax: 6147 1920, 2500 5764 Email : info@himedialabs.com Web : www.himedialabs.com

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