

## 1 M Tris-HCl Solutions

DNase, RNase and protease-none detected

Catalog Number **ML 017-74 (pH 7.4)**  
**ML 017-76 (pH 7.6)**  
**ML 017-80 (pH 8.0)**

Storage Temperature 15~30°C

### Product Description

1 M Tris-HCl buffer is a versatile buffer solution used for a wide variety of purposes in molecular biology, such as the production of Tris-EDTA (TE) buffer. Tris {tris(hydroxymethyl)aminomethane; 2-amino-2-(hydroxymethyl)-1,3-propanediol; trometh-amino; trometamol; C<sub>4</sub>H<sub>11</sub>NO<sub>3</sub>, FW 121.1} is a representative buffer solution appropriate for a vast majority of enzyme reactions and biochemical experiments. Tris, which is highly soluble, exhibits a pKa of 8.1 (25°C) and buffers at maximum efficiency between pH ranges of 7.0~9.1. When the pH goes below 7.0 or above 9.1, however, the product's buffering capability diminishes and the pH becomes susceptible to temperature (1°C increase leads to 0.03 drop in pH). For accurate pH measurements, a specialized pH probe for Tris solutions is required. The product is highly reactive and cannot be used with glutaraldehyde, formaldehyde, and glyoxal. Some animal cells also show toxic responses to the product; therefore such facts should be considered in advance to using the product. To dilute WELGENE's 1 M Tris-HCl buffer, Ultra Pure Water (**ML 019-02**) is to be used.

**ML 017-74** contains 121.1 g/L Tris base in Ultra Pure Water (**ML019-02**). pH is 7.4.

**ML 017-76** contains 121.1 g/L Tris base in Ultra Pure Water (**ML019-02**). pH is 7.6.

**ML 017-80** contains 121.1 g/L Tris base in Ultra Pure Water (**ML019-02**). pH is 8.0.

### Storage/Stability

The concentrated 1 M Tris-HCl buffers should be stored at 15~30°C. Deterioration of the solution may be recognized by (1) precipitate or particulate matter throughout the solution, (2) cloudy appearance, (3) color change, and/or (4) pH change. Product label bears expiration date.

### Precautions

For *In Vitro* Use Only

	mM		
Components	ML 017-74	ML 017-76	ML 017-80
Tris base	121.1	121.1	121.1
pH	7.4	7.6	8.0

### Product Profile

Appearance	Clear colorless solution
DNase, RNase, and Proteinase	None Detected
Sterility	Sterilized by autoclaving (121°C, 20 min) and 0.2 μm filtration system. Sterility tests are performed in accordance with protocols described in USP.