



# Certificate of Analysis

## TRIS

### UltraPure – Molecular Biology Grade - ACS

<u>Catalog #</u>	<u>Size</u>
IB70142	500gm
IB70144	1Kg
IB70145	5Kg
IB70147	50Kg

**Catalog Number:** IB70142, IB70144, IB70145, IB70147

**Lot Number:** 18B1005

**Molecular Formula:** C<sub>4</sub>H<sub>11</sub>NO<sub>3</sub>

**Molecular Weight:** 121.14

**Appearance:** White crystals or crystalline powder

**Color:** White

<u>Assay</u>	<u>Min</u>	<u>Max</u>	<u>Actual</u>
Assay (by titration, on dried basis)	99.8%	100.3%	100.1
Absorbance (1M solution in H <sub>2</sub> O) 280 nm		≤0.1	<0.1
Absorbance (40% solution in H <sub>2</sub> O) 290 nm		≤0.2	0.1
Identification (by IR)			PASS
Insoluble Matter		≤0.005%	0.005
pH (0.05M solution in H <sub>2</sub> O @ 25°C)	10.3	10.5	10.3
Water (by Karl Fischer)		≤2%	0.1
Heavy Metals (as Pb)		≤5 ppm	1
Arsenic (As)		≤5 ppm	1
Copper (Cu)		≤1 ppm	1
Iron (Fe)		≤2 ppm	1
Lead (Pb)		≤1 ppm	1
Magnesium (Mg)		≤10 ppm	1
Electrophoresis			PASS
DNase Assay			NONE
RNase Assay			NONE
Protease Assay			NONE

#### Storage

Store at room temperature. Protect from moisture.

*This signature indicates that the above material has met all quality specifications and has been reviewed by a quality representative.*

Signature: K. Kutsch  
Date: 02/07/2018