



# Product Specifications

## EDTA SOLUTION 0.5M

<u>Catalog #</u>	<u>Size</u>
IB70184	100ml
IB70185	(4) 100ml

### Physical Specifications

CAS#	6381-92-6
Molecular Formula	$C_{10}H_{14}N_2O_8Na_2 \cdot 2H_2O$
Purity (EDTA component; dry basis)	>99.0%
Insolubles	<0.01%
Heavy Metals	<0.005%
$A_{280-600}$ (0.5M, water)	<0.10%

A 0.5M aqueous solution of a Molecular Biology Certified Grade EDTA pH adjusted to 8.0

### Molecular Biology Specifications

DNase assay	None Detected
RNase assay	None Detected
Protease assay	None Detected

### Recommended Use

EDTA is commonly used in biological and electrophoresis buffer systems. Located in the table below are some of the commonly used electrophoresis buffers and their recipe as a concentrated stock.

<u>Buffer</u>		<u>Concentrated stock solution (per liter)</u>
Tris-acetate (TAE buffer)	50X:	<b>242gm Tris base</b> 57.1ml glacial acetic acid 100ml 0.5M EDTA (pH 8.0)
Tris-borate (TBE buffer)	5X:	<b>54gm Tris base</b> 27.5gm boric acid 20 mL 0.5M EDTA (pH 8.0)
Tris-phosphate (TPE buffer)	10X:	<b>108gm Tris base</b> 15.5 mL 85% phosphoric acid (1.679g/ml) 40ml 0.5M EDTA (pH 8.0)

Sambrooks, J., Fritsch, E.F., Manlatis, T (1989) Molecular Cloning A Laboratory Manual vol. 3 8.23

### Storage

Store at room temperature. Protect from moisture.

### Warning

Irritant. Causes irritation to eyes, skin and mucous membranes. Avoid breathing dust. Do not take internally. Wash thoroughly after handling. See Material Safety Data Sheet for additional information.

**FOR RESEARCH AND DEVELOPMENT PURPOSES ONLY**

4/1/2011