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A Geno Technology, Inc. (USA) brand name

Tube-O-DIALYZER™

No Loss Dialyzer for Small Samples

(Cat. # 786-610 to 786-624)

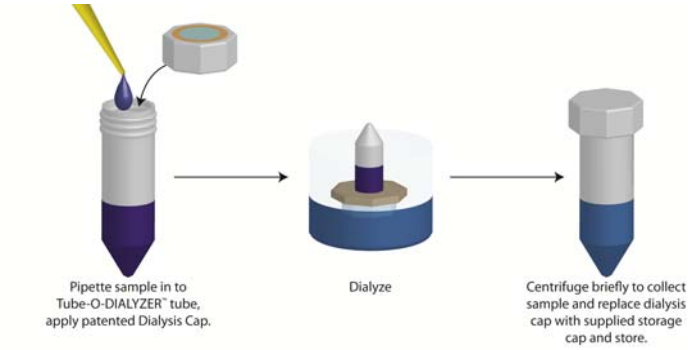


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INTRODUCTION

Tube-O-DIALYZER™ is a mini dialysis system for small sample volumes (20µl-2.5ml) that ensures 100% sample recovery, even if precipitation occurs. Tube-O-DIALYZER™ is based on a patented tube design that permits easy sample handling and a dialysis cap. Simply pipette your sample into the Tube-O-DIALYZER™ tube, seal with the Tube-O-DIALYZER™ dialysis cap and invert in your dialysis solution and dialyze. Following dialysis, briefly centrifuge the complete Tube-O-DIALYZER™ for five seconds and collect 100% of your sample. For storage of the dialyzed sample, replace the dialysis cap with the supplied storage caps.

Tube-O-DIALYZER™ consists of a regenerated cellulose dialysis membrane, a neutral non binding dialysis membrane, with Molecular Weight Cut Offs (MWCO) of 1,000, 4,000, 8,000, 15,000, or 50,000 Daltons.



ITEM(S) SUPPLIED

	Tube-O-DIALYZER™, Micro For 20-250µl Samples				
Cat. #	**786-610**	**786-611**	**786-612**	**786-613**	**786-614**
MWCO (Da)	1,000	4,000	8,000	15,000	50,000
Tube-O-DIALYZER™, Micro	20	20	20	20	20
Floats (Micro)	6	6	6	6	6
Storage Caps (Micro)	20	20	20	20	20

	Tube-O-DIALYZER™, Medi For 0.2-2.5ml Samples				
Cat. #	**786-615**	**786-616**	**786-617**	**786-618**	**786-619**
MWCO (Da)	1,000	4,000	8,000	15,000	50,000
Tube-O-DIALYZER™, Medi	20	20	20	20	20
Floats (Medi)	6	6	6	6	6
Storage Caps (Medi)	20	20	20	20	20

	Tube-O-DIALYZER™, Mixed For 20-250µl & 0.2-2.5ml Samples				
Cat. #	**786-620**	**786-621**	**786-622**	**786-623**	**786-624**
MWCO (Da)	1,000	4,000	8,000	15,000	50,000
Tube-O-DIALYZER™, Micro	10	10	10	10	10
Tube-O-DIALYZER™, Medi	10	10	10	10	10
Floats (Micro)	3	3	3	3	3
Floats (Medi)	3	3	3	3	3
Storage Caps (Micro)	10	10	10	10	10
Storage Caps (Medi)	10	10	10	10	10

STORAGE CONDITIONS

The kit is shipped at ambient temperature. Upon arrival, store at 4°C. Stable for 1 year, if stored correctly.

PREPARATION BEFORE USE

Tube-O-DIALYZER™ are supplied in a preservative to maintain quality. Prior to use discard the preservative from the tube and place the dialysis cap upside down in a beaker or other suitable container and add 1-2ml DI water or dialysis buffer to rinse. Keep the Tube-O-DIALYZER™ membrane wet until required

INSTRUCTIONS FOR USE

1. Pipette your sample directly into the Tube-O-DIALYZER™ tube. For Tube-O-DIALYZER™ Micro use 20-250µl and for Tube-O-DIALYZER™ Medi use 0.2-2.5ml.
2. Remove the Tube-O-DIALYZER™ dialysis cap from the rinse water/buffer and carefully remove excess liquid with a pipette tip.
3. Screw the dialysis cap on to the Tube-O-DIALYZER™ tube until finger tight. Invert the Tube-O-DIALYZER™, ensuring the entire sample rests upon the membrane. ***NOTE:*** *If sample is too viscous, centrifuge the Tube-O-DIALYZER™ in an inverted position (i.e. the dialysis membrane facing downward). We recommend inverting the Tube-O-DIALYZER™ in the Tube-O-DIALYZER™ centrifuge adaptor (Cat. # 786-145) or a 50ml centrifuge tube and centrifuging for 5 seconds at 500-1,000g. Do not spin longer as this may cause the membrane to rupture.*
4. Keeping the Tube-O-DIALYZER™ in an inverted position, slide the supplied float onto the Tube-O-DIALYZER™ tube. Place the Tube-O-DIALYZER™ in the dialysis buffer.
5. Ensure that the dialysis membrane contacts the dialysis buffer. If there are large air bubbles trapped underneath the dialysis membrane surface, tilt the tube or squirt buffer to remove the air bubbles. Gently, stir the dialysis buffer. For efficient and complete dialysis we recommend inverting or gently tapping the Tube-O-DIALYZER™ 1-2 times during dialysis to mix the sample. If necessary repeat the centrifugation in step 3.
6. *Dialysis Time:* Dialysis time will depend on the nature of sample, MWCO of the Tube-O-DIALYZER™, sample and dialysis buffer volume and concentration. Higher MWCO will allow faster dialysis. As a guide, the sample should be dialyzed for 2-12h. Dialysis buffer should also be replaced at least once during dialysis.
7. After dialysis, remove the Tube-O-DIALYZER™ from the float and immediately spin the Tube-O-DIALYZER™ (in up-right position) for 5-6 seconds at 500-1,000xg. ***NOTE:*** *Do not spin longer as this may cause the membrane to rupture.*
8. Discard the dialysis cap and replace with the supplied Storage Cap.

MEMBRANE COMPATIBILITY

Acetic acid (diluted-5%)	R	Formaldehyde (2%)	R	Nitric acid (concentrated)	NR
Acetic acid (med conc-25%)	R	Formaldehyde (30%)	R	Nitrobenzene	NR
Acetic acid (glacial)	R	Formic acid (25%)	R	Nitropropane	NR
Acetone	R	Formic Acid (50%)	R	Oils, mineral	R
Acetonitrile	R	Freon®	R	Pentane	R
Ammonium hydroxide (diluted)	R	Gasoline	R	Perchloric acid (25%)	NR
Ammonium hydroxide (med conc)	NR	Glycerine	R	Perchloroethylene	R
Amyl acetate	R	Glycerol	R	Petroleum based oils	R
Amyl alcohol	R	Hexane	R	Petroleum ether	R
Aniline	R	Hexanol	R	Phenol (0.5%)	R
Benzene	R	Hydrochloric acid (diluted-5%)	R	Phenol (10%)	R
Benzyl alcohol	R	Hydrochloric acid (25%)	NR	Phosphoric acid (25%)	NR
Boric acid	R	Hydrochloric acid (37%)	NR	Potassium hydroxide (1N)	NR
Brine	R	Hydrofluoric acid (25%)	NR	Potassium hydroxide (25%)	R
Bromoform	R	Hydrogen peroxide (30%)	NR	Potassium hydroxide (50%)	NR
Butyl acetate	R	Iodine solutions	NR	Propanol	R
Butyl alcohol	R	Isobutyl alcohol	R	Pyridine	R
Butyl cellosolve	NR	Isopropanol	R	Silicone oil	R
Butylraldehyde	R	Isopropyl acetate	R	Sodium hydroxide (0.1N)	R
Carboh tetrachloride	R	Isopropyl alcohol	R	Sodium hydroxide (diluted-5%)	NR
Cellosolve	NR	Isopropyl ether	R	Sodium hydroxide (25%)	NR
Chloracetic acid	R	Jet Fuel 640A	R	Sodium hydroxide (conc-50%)	NR
Chloroform	R	Kerosene	R	Sodium Hydroxide (Concentrated)	NR
Chromic acid	NR	Lactic acid	R	Sodium Hypochlorite	R
Cresol	R	Methyl acetate	R	Sulfuric acid (diluted-5%)	R
Cyclohexane	R	Methyl alcohol	R	Sulfuric acid (med conc-25%)	R

Cyclohexanone	R	Methyl alcohol (98%)	R	Sulfuric acid (6N)	NR
Diacetone alcohol	R	Methyl cellosolve	NR	Sulfuric Acid (concentrated)	NR
Dichloromethane	R	Methyl Chloride	R	Tetrahydrofuran	R
Dimethyl formamide	NR	Methyl ethyl ketone	R	Toluene	R
Dimethylsulfoxide	R	Methyl formate	NR	Trichloroacetic acid (25%)	NR
1,4 Dioxane	NR	Methyl isobutyl ketone	R	Trichlorobenzene	R
Ethers	R	Methylene chloride	R	Trichloroethane	R
Ethyl acetate	R	N-Methyl-2-Pyrrolidone	R	Trichloroethylene	R
Ethyl Alcohol	R	Mineral spirits	R	Triethylamine	R
Ethyl alcohol (15%)	R	Monochlorobenzene	R	Turpentine	R
Ethyl alcohol (95%)	R	Nitric acid (diluted-5%)	R	Urea	R
Ethylene dichloride	R	Nitric acid (med conc-25%)	NR	Urea (6N)	R
Ethylene glycol	R	Nitric acid (6N)	NR	Water	R
Ethylene oxide	NR	Nitric acid (conc-70%)	NR	Xylene	R

NR: Not Recommended; R: Recommended. This chart is intended as a guide and not a guarantee of compatibility.

OPTIONAL ACCESSORIES

- **Centrifuge Tube Adaptor [Cat # 786-145]:** Optional adaptor for centrifugation in bench top centrifuges. Pack of 2.
- **Micro Dialysis Cups [Cat # 786-145C]:** For dialysis of small sample volumes, equilibrium dialysis, dialysis of single use preparations, and other dialysis applications. Dialysis buffer capacity of 2-10ml.
- **Tube-O-Tanks [Cat # 786-145D & 786-145E]:** A dialysis tank specifically designed for use with Tube-O-DIALYZER™. Two sizes are available, small and large tanks, suitable for Micro and Medi size Tube-O-DIALYZER™, respectively. Each tank will accommodate seven Tube-O-DIALYZER™.
- **Tube-O-Array™ Dialyzer [Cat # 786-145A]:** Specifically developed for dialysis-equilibration of samples prior to 2D-gel analysis or other applications. Optimize up to 12 samples at a time. Consists of a tray for holding up to 12 Tube-O-DIALYZER™ assemblies. Suitable for 20µl to 2.5ml samples each.
- **Floats:** Additional Tube-O-DIALYZER floats, both Micro [Cat # 786-141F] and Medi [Cat # 786-142F] sizes are also available separately.

TROUBLESHOOTING

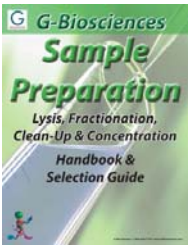
1. **Reusing Tube-O-DIALYZER™:** Tube-O-DIALYZER™ is not recommended for re-use because of obvious reason of cross contamination.
2. **Precipitate Forms in Sample**: As with all dialysis methods, precipitation may occur in your sample. The unique tube format means the entire Tube-O-DIALYZER™ can be centrifuged to collect the precipitate. We recommend centrifuging for 5-6 seconds at 500-1,000xg. Check the sample and if necessary repeat the centrifugation. *Do not spin longer as this may cause the membrane to rupture.*
3. **Mishandling Dislodges White Gasket:** In some cases the white gasket inside the Tube-O-DIALYZER™ cap can be dislodged by mishandling. In this event, we recommend using the base of the Tube-O-DIALYZER™ tube to push the gasket back in to position.

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