

## Bio-Reaction Tubes



- Bio-reaction tubes offer a convenient and economical option for small scale, high density suspension cell culture
- Ideal for biological reaction applications that require sterile conditions and free gas exchange
- Aseptic conditions are maintained through 0.22µm hydrophobic vented membrane
- Useful in the screening and optimization processes of suspension cells
- The reaction parameters can be optimized using small amounts of materials, maximizing the number of parallel experiments that can be performed simultaneously
- Ideal for suspension cell culture, bacterial growth, seeding larger bioreactors and supporting start-up testing procedures for larger bioreactors

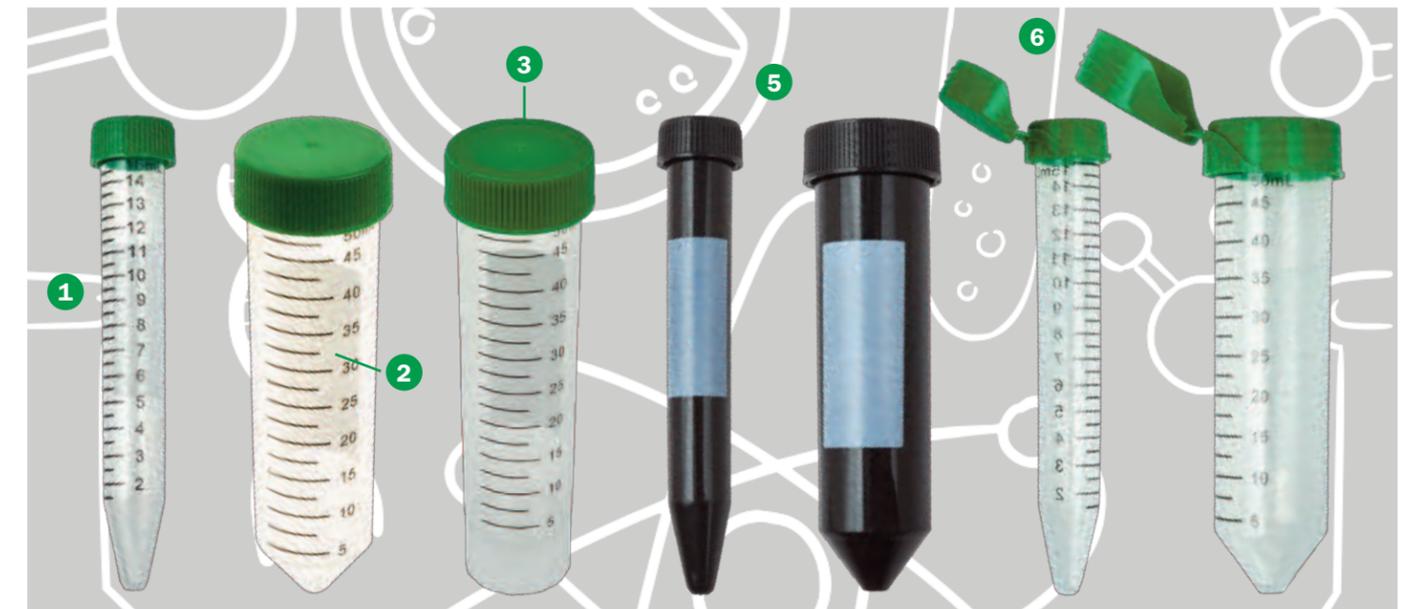
- 1 Feature a 0.22µm hydrophobic membrane in the vent cap
- 2 Easy-to-read black graduations
- 3 Large white marking area



Vent control labels for 50mL Bio-Reaction Tube Caps cover 1 to 5 of the cap vent openings to control the amount of gas exchange

BIO-REACTION TUBES		S, R/D F, NP, USP, A, PP		
Part No.	Product Description	Pack Description	Qty/Case	Max Force (RCF) g
229471	15mL Bio-Reaction Tube	10/Re-sealable Bag	100	12000
229472	15mL Bio-Reaction Tube	50/Foam Rack	300	12000
229475	50mL Bio-Reaction Tube	10/Re-sealable Bag	100	16000
229476	50mL Bio-Reaction Tube	25/Foam Rack	300	16000
229479	50mL Self-Standing Bio-Reaction Tube	10/Re-sealable Bag	100	6000
BIO-REACTION TUBE CAPS		S, R/D F, NP, USP, HDPE		
229473	CAP ONLY, Vented, Fits 15mL Bio-Reaction Tube	25/Re-sealable Bag	100	NA
229477	CAP ONLY, Vented, Fits 50mL Bio-Reaction Tube	25/Re-sealable Bag	100	NA
BIO-REACTION TUBE VENT CONTROL LABELS				
229478	Vent Control Label, 50mL Bio-Reaction Tube, Sheet	10 Sets/Page	10 Pages	NA

## Centrifuge Tubes



Centrifuge Tubes are available with a variety of special features and packaging options. Please refer to the Centrifuge Tube Selection Guide below and pages 4 - 8 for additional information on tube options.

- Temperature range of -80°C to 120°C (polypropylene only)

- 1 Graduations are printed in bold easy-to-read black ink and are accurate to +/- 2%
- 2 Large white marking area provides excellent contrast for identification
- 3 Easy to write on flat surface polyethylene (HDPE) caps feature integrated leak-proof seal
- 4 Tubes include graduations molded into the conical bottom, ideal for pellet viewing and small volume quantification
- 5 Black Centrifuge Tubes protect light sensitive compounds and eliminate the need to wrap tubes with aluminum foil
- 6 Ergonomic flip top cap is designed for single handed operation



## Centrifuge Tube Selection Guide

Options listed below are for sterile, conical bottom, polypropylene centrifuge tubes unless otherwise noted.

TUBE DESCRIPTION	15mL				50mL			
	Bag	Paper Rack	Foam Rack	Plastic Rack	Bag	Paper Rack	Foam Rack	Plastic Rack
Flat Top Screw Cap (pages 6 - 7)	229411	229410	229412	229418	229421	229420	229422	229428
Flip Top Cap (page 6)	229417	229416			229427	229426		
Sure Cap (page 8)	229401				229402			
Vented (Bio-Reaction) Cap (page 4)	229471		229472		229475		229476	
Vented (Bio-Reaction) Cap - Self-Standing (page 4)					229479			
Polystyrene (Sure Cap only) (page 8)	229491							
Black Opaque (page 6)	229431 229432				229433 229434			
Self-Standing (page 6)					229430			

Additional options available for non-sterile centrifuge tubes, see page 6.