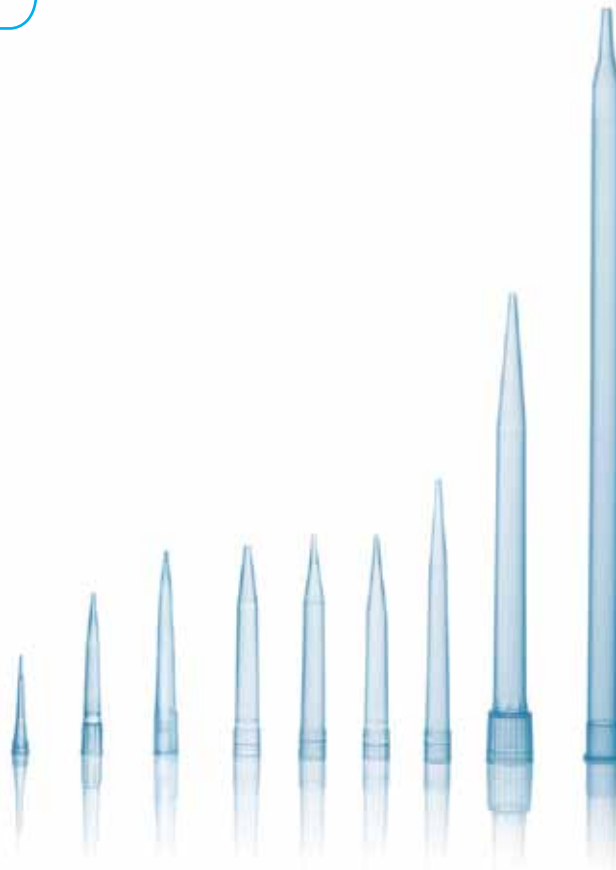




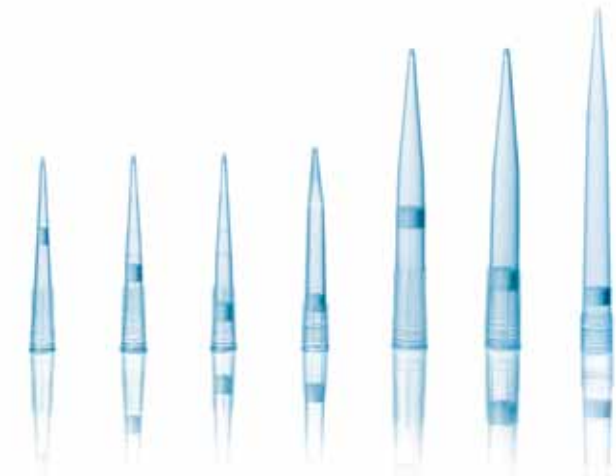


Fully autoclavable



Standard Tips

Biohit Standard Tips are made of premium-grade virgin polypropylene. The tips are metal-free and available in autoclavable (121°C; 20 min; 1 bar) Single Tray boxes (as certified RNase, DNase and endotoxin free), in space saving Refill System and in Bulk packages. Electron beam pre-sterilized tips in trays are also available.



Filter Tips

Biohit Filter Tips are made of virgin polypropylene and feature filter (PE) barriers to prevent aerosol and liquid contamination. This helps protect against the risk of cross-contamination and reduces maintenance requirements of the pipette. Filter tips are tray-packed, electron beam pre-sterilized and certified as RNase, DNase and endotoxin free.

Best tip ever – premium pipette tips from Biohit

Biohit offers you precision-made pipette tips for use with all Biohit and most other brand pipettes providing excellent reproducibility and accuracy. All standard tips and trays are autoclavable. You can purchase these natural polypropylene tips in single trays as non-sterile or pre-sterilized, in refills and in bulk packaging. And last but not the least, Biohit tips are manufactured in a protected environment, following Good Manufacturing Practices (GMP), causing as little environmental loading as possible.





Less waste!

Single Tray boxes for safer laboratory work

The Single Tray tip boxes are a must for demanding laboratory work. The rigid and strong polypropylene boxes and trays are fully autoclavable. The tray holds 96 highest grade non-wettable virgin polypropylene tips in an 8 x 12 microplate format. The flip-top boxes can be opened and closed with a single hand. The colour coding of the tip trays allows immediate tip volume recognition. Non-sterile and pre-sterilized standard tips are available in single trays as certified RNase, DNase and endotoxin free as well as metal-free.

 Autoclaving instructions on page 84

Biohit tips and boxes are made of recyclable material

- Tips, trays & boxes: polypropylene (PP)
- Filters in filter tips: polyethylene (PE)

The ecological Refill System

The Refill System of Biohit is environmentally friendly with a completely recyclable packaging. The Refill Tower uses up to 61% and the Refill Pack up to 35% less packaging material than the Single Tray boxes. The tip trays are easily transferred from a space-saving Tower or Refill Pack to the Single Tray tip boxes. The Refill System range covers the five most popular standard tip sizes.



Bulk Tips – the economic option

The most economic alternative is to buy Bulk Tips that are available in boxes with 100, 400 or 1000 standard tips (depending on tip size, see ordering details). However, no compromises are made regarding the quality and the bulk tips undergo the same rigid quality control as other Biohit tips.

Instructions on how to use the Refill Tower for 10, 300 and 350 µl tips



- Remove the empty tray from the tip box.
- Lift up the upper part of the tower box.
- Take one single-tray from the refill tower.
- Put the single-tray into the empty tip box.

Instructions on how to use the Refill Pack for 1000 and 1200 µl tips



- Detach a Refill Pack.
- Open the cover film from the marked corner.
- Remove the empty tray from the tip box.
- Take the tip tray from the Refill Pack and put it into the empty tip box.

Every pipette needs the best tip

In liquid handling, the pipette and the tip always form a system. Biohit tips have been developed to perfectly match Biohit pipettes. By developing and producing both pipettes and tips Biohit is able to offer the best possible compatibility and pipetting results.

For example, the unique Optiload tip loading mechanism (see picture) in mLINE, Proline Plus and eLINE pipettes allows tips to be loaded with constant force, which, in turn, secures optimal tip sealing and minimum tip ejection force.

Rigorous quality control to ensure accurate pipetting results

As the tip is an integral component of the pipetting system, its shape, material properties and fit have a considerable influence on pipetting accuracy. Variation in any of these will cause errors in the volume pipetted.

Quality is not automatically guaranteed unless the quality control (QC) process of the manufacturer is strictly controlled. All Biohit tips are fully traceable - mould cavity identification markings are printed in each tip and tip boxes are lot numbered. The quality control includes thorough in-house testing and checks. Each lot of the single tray products is also tested and certified as RNase, DNase and endotoxin free.



The quality management system follows not only ISO 9001, but also ISO 13485 (ISO standard for medical devices), which enables Biohit to give CE / IVD (*In Vitro Diagnostics*) certification for both pipettes and pipette tips.



All single tray products are tested and certified for purity by an independent laboratory.



Biohit pipette tips are:



- Made to match Biohit pipettes
- Made of high quality pure virgin polypropylene
- Free from dust or particles
- Certified free from metals, like cadmium
- Matched with the pipette tip cone for secure sealing and easy tip ejection
- Highly resistant to chemicals
- Highly thermally resistant
- Autoclavable
- Packed in easy-to-use, fully recyclable and environmentally friendly (ISO 14001) packages
- CE/IVD marked and covered by ISO 13485
- Subject to tight quality control
- Traceable: Mould cavity identification markings in each tip and lot numbered tip packages





Clean room quality manufacturing

The manufacturing process and the environment in which the pipette tips are moulded and packaged are potential sources of contamination. If tips are manufactured in an open environment, they may not be contaminant free. As the tip is an integral component of the pipetting system, its shape, fit, material properties and especially manufacturing processes, have a considerable influence on the pipetting accuracy, purity and the pipetting results.

The certified Biohit pipette tips have been carefully manufactured in a protected environment in Finland. To avoid contamination from human contact, Biohit has automated the whole manufacturing process. All Biohit tips are fully traceable from inspection of raw materials to monitoring the final product and testing each lot for contaminants after production.

Biohit's tip production consists of experienced personnel, high capacity injection moulding technology and premium grade pure polypropylene (PP). Equally important are automated, clean production conditions, from the raw material to the final product. To minimise contamination, special particle filtration (HEPA) and positive pressure are applied to keep contaminants out of the manufacturing area. The pure polypropylene plastic material is automatically fed from silos through vacuum loaders to moulding machines. The moulding machines are located in closed environments with robots automatically loading the tips



The automatic camera checks each 10 µl Biohit pipette tip thus ensuring the quality control of every individual tip.

onto the tip trays and moving the loaded trays to packaging. All machines and robots are constantly monitored by dedicated software.

All Biohit tip trays are individually and automatically wrapped in air-tight plastic to rule out any danger of contamination. Personnel in production and packaging are highly experienced, trained and equipped with the appropriate, specially designed protective clothing, masks, hair nets and gloves to diminish the contamination risks.

Automated tip manufacturing process from handling of raw material to packaging and storage.





Single Tray



Refill Pack



Refill Tower



Bulk Tips

Biohit Standard Tips

Tip	Tip ID	Volume Range	Length	Packaging	Type	Qty/Unit	Cat. No.
	A	0.1 - 10 µl	31.5 mm	Single Tray	Non Sterile	10 x 96 Tips	790010
				Single Tray	Pre-Sterilized	10 x 96 Tips	790011
				Refill Tower	Non Sterile	10 x 96 Tips	790012
				Bulk in Box	Non Sterile	1000 Tips	781349
	C	0.5 - 300 µl	51 mm	Single Tray	Non Sterile	10 x 96 Tips	790300
				Single Tray	Pre-Sterilized	10 x 96 Tips	790301
				Refill Tower	Non Sterile	10 x 96 Tips	790302
				Bulk in Box	Non Sterile	1000 Tips	780011
New design	D	5 - 350 µl	54 mm	Single Tray	Non Sterile	10 x 96 Tips	790350
				Single Tray	Pre-Sterilized	10 x 96 Tips	790351
				Refill Tower	Non Sterile	10 x 96 Tips	790352
				Bulk in Box	Non Sterile	1000 Tips	780033
	E	10 - 1000 µl	71.5 mm	Single Tray	Non Sterile	10 x 96 Tips	791000
				Single Tray	Pre-Sterilized	10 x 96 Tips	791001
				Refill Pack	Non Sterile	10 x 96 Tips	791002
				Bulk in Box	Non Sterile	400 Tips	780021
				Bulk in Box	Non Sterile	1000 Tips	780016
Wide Bore Tip	G	10 - 1000 µl	68.5 mm	Single Tray	Non Sterile	10 x 96 Tips	791020
				Single Tray	Pre-Sterilized	10 x 96 Tips	791021
				Bulk in Box	Non Sterile	1000 Tips	780053
	H	50 - 1200 µl	71.5 mm	Single Tray	Non Sterile	10 x 96 Tips	791200
				Single Tray	Pre-Sterilized	10 x 96 Tips	791201
				Refill Pack	Non Sterile	10 x 96 Tips	791202
				Bulk in Box	Non Sterile	1000 Tips	780043
Extra Long Tip	Z	50 - 1200 µl	90 mm	Single Tray	Non Sterile	10 x 96 Tips	791210
				Single Tray	Pre-Sterilized	10 x 96 Tips	791211
	J	100 - 5000 µl	150 mm	Single Tray	Non Sterile	50 Tips	780304
				Single Tray	Pre-Sterilized	50 Tips	780305
				Bulk in Box	Non Sterile	100 Tips	780300
				Bulk in Carton	Non Sterile	1000 Tips	780308
Extra Long Tip for XL and Midi Plus	K	0.5 - 10 ml	242 mm	Bulk in Box	Non Sterile	100 Tips	780310
For mLINE and Proline Plus	U	1-10 ml	161 mm	Bulk in Box	Non Sterile	250 Tips	780315














RNase, DNase & Endotoxin Certificates for Single Tray Tips (Standard and Filter Tips) can be downloaded using the lot number* from www.biohit.com/tipquality

* available for lots manufactured after June 2005

Empty Tip Boxes for Refill System (tips and trays are not included)

Item	Tip ID	Tip Type (Standard Tips)	Qty/Unit	Cat. No.
Empty Tip Box for Refill System	A, C, D	10, 300, 350 µl	10	790910
Empty Tip Box for Refill System	E, H	1000, 1200 µl	10	790920

Biohit Filter Tips

Tip	Tip ID	Volume Range	Length	Packaging	Type	Qty/Unit	Cat. No.	
	L	0.1 - 10 µl	31,5 mm	Single Tray	Pre-Sterilized	10 x 96 Tips	790011F	New design
	M	0.1 - 10 µl	46 mm	Single Tray	Pre-Sterilized	10 x 96 Tips	783201	
	N	0.5 - 20 µl	51 mm	Single Tray	Pre-Sterilized	10 x 96 Tips	790021F	New design
	O	2 - 120 µl	51 mm	Single Tray	Pre-Sterilized	10 x 96 Tips	790101F	New design
	P	5 - 200 µl	54 mm	Single Tray	Pre-Sterilized	10 x 96 Tips	790201F	New design
	Q	5 - 300 µl	52.5 mm	Single Tray	Pre-Sterilized	10 x 96 Tips	790301F	New design
	R	10 - 500 µl	78 mm	Single Tray	Pre-Sterilized	10 x 100 Tips	783206	
	S	50 - 1000 µl	78 mm	Single Tray	Pre-Sterilized	10 x 96 Tips	791001F	New design
	T	50 - 1200 µl	90 mm	Single Tray	Pre-Sterilized	10 x 96 Tips	791211F	New product code

Biohit Filter Tip Conversion Chart						Coming in 3Q/2009		
Old Tip Cat. No	783200	783209	783203	783221	783205	783207	783208	783222
New Tip Cat. No	790011F	790021F	790101F	790101F	790201F	790301F	791001F	791211F

Mechanical Pipettes

Standard Tips

10 300 350 1000 5000 10 000

Filter Tips

10 10 Ext. 20 120 200 300 500 1000 1000 WB


Special Tips

	Cat. No.	µl	A*	C	D	E	J	U	L	M	N	O	P	Q	R	S	G
mLINE	725010	0.1-3	•						•	•							
Single Channel	725020	0.5-10	•						•	•							
	725030	2-20		•							•						
	725050	10-100		•	•							•					
	725060	20-200		•	•								•	•			
	725070	100-1000				•										•	•
	725080	500-5000					•										
	725090	1-10 ml						•									
8-Channel	725120	0.5-10	•						•	•							
	725130	5-100		•	•							•					
	725140	30-300			•								•				
12-Channel	725220	0.5-10	•						•	•							
	725230	5-100		•	•							•					
	725240	30-300			•								•				
Proline Plus	728010	0.1-3	•						•	•							
Adjustable Volume Single Channel	728020	0.5-10	•						•	•							
	728030	2-20		•							•						
	728050	10-100		•	•							•					
	728060	20-200		•	•								•	•			
	728070	100-1000				•										•	•
	728080	500-5000					•										
	728090	1-10 ml						•									
8-Channel	728590	10 ml						•									
	728120	0.5-10	•						•	•							
	728130	10-100		•	•							•					
	728140	30-300			•								•				
12-Channel	728220	0.5-10	•						•	•							
	728230	10-100		•	•							•					
	728240	30-300			•								•				
	728515	5	•						•	•							
Fixed Volume Single Channel	728520	10	•						•	•							
	728530	20		•							•						
	728535	25		•								•					
	728545	50		•								•					
	728550	100		•	•							•					
	728560	200		•	•								•	•			
	728565	250				•									•	•	•
	728567	500				•									•	•	•
	728570	1000				•										•	•
	728575	2000					•										
	728580	5000						•									
	728590	10 ml															•
Proline Adjustable Volume Single Channel	720005	0.1-2.5	•						•	•							
	720000	0.5-10	•	•					•	•	•						
	720080	2-20		•							•	•					
	720020	5-50		•	•							•					
	720050	10-100		•	•							•	•	•			
	720070	20-200		•	•								•	•			
	720060	100-1000				•										•	•
8-Channel	720110	1000-5000					•										
	720210	0.5-10	•						•	•							
	720220	5-50		•	•							•	•	•			
	720240	50-300			•								•				
12-Channel	720310	0.5-10	•						•	•							
	720320	5-50		•	•							•	•	•			
	720340	50-300			•								•				
	722001	5	•	•					•	•	•						
Fixed Volume Single Channel	722004	10	•	•					•	•	•						
	722010	20		•	•						•	•					
	722015	25		•	•							•					
	722020	50		•	•							•					
	722025	100		•	•							•	•	•			
	722030	200		•	•								•	•			
	722035	250				•									•	•	•
	722040	500				•									•	•	•
	722045	1000				•										•	•
	722050	2000					•										
722055	5000						•										

* Extended inaccuracy and imprecision of the pipettes with pre-sterilized A tips.



Electronic Pipettes

	Cat. No.	µl	Standard Tips							Filter Tips							Special Tips									
			A'	C	D	E	H	J	K	L	M	N	O	P	Q	R	S	T	G	Z						
 eLINE Single Channel	73002X	0.2-10	•										•	•												
	73004X	5-120		•	•											•										
	73006X	10-300			•												•									
	73008X	50-1000				•													•					•		
	73010X	100-5000							•																	
	8-Channel	73032X	0.2-10	•										•	•											
		73034X	5-120		•	•											•									
		73036X	10-300			•												•								
		73039X	50-1200					•														•			•	
	12-Channel	73042X	0.2-10	•										•	•											
73044X		5-120		•	•											•										
73046X		10-300			•												•									
73049X		50-1200					•														•			•		
Proline Single Channel	710520	0.2-10	•										•	•												
	710010	5-100		•												•										
	710030	10-250		•	•												•									
	710100	10-500				•											•						•			
	710020	50-1000				•													•				•			
	710040	50-1200					•														•			•		
	710500	100-5000							•																	
	8-Channel	710200	0.2-10	•										•	•											
		710210	5-100		•	•											•	•	•							
		710220	25-250			•												•								
710800		50-1200					•														•			•		
12-Channel	710300	0.2-10	•										•	•												
	710310	5-100		•	•											•	•	•								
	710320	25-250			•												•									
	710810	50-1200					•														•			•		
ePET Single Channel	71052XET	0.2-10	•										•	•												
	71001XET	5-100		•												•										
	71002XET	50-1000				•													•				•			
	71004XET	50-1200					•														•			•		
	71050XET	100-5000							•																	
	8-Channel	71020XET	0.2-10	•										•	•											
		71021XET	5-100		•	•											•	•	•							
		71022XET	25-250			•												•								
		71080XET	50-1200					•														•			•	
	12-Channel	71030XET	0.2-10	•										•	•											
71031XET		5-100		•	•											•	•	•								
71032XET		25-250			•												•									
71081XET		50-1200					•														•			•		
Proline XL Midi Plus	71090X	0.1-25 ml							•	•																
	71093X	1-100 ml							•	•																

* Extended inaccuracy and imprecision of the pipettes with pre-sterilized A tips.