

Microinjection Cannula



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The microinjection cannula is designed for stereotactically implant the guide cannula in the targeted brain region of the experimental animals for acute and chronic intracranial drug administration. RWD offers customized services for users, the users can customize according to specific experimental requirements.

Features

- One implantation for multiple drug administration, protecting the animal's brain from repeated injury.
- The animals can be administered while awake and for the subsequent experiments.
- Different specifications are available for precise drug administration in different regions of rat and mouse brains.
- Single cannula and double cannula are available to meet requirements for injections in unilateral brain regions or bilateral brain regions.

Single Cannula

Components

Guide cannula

Guide cannula consists of a threaded cylindrical plastic pedestal and a stainless steel tube. It has to be preimplanted into brain and fixed with dental cement. Both dummy cannula and internal cannula can be inserted into guide cannula individually.



Dummy cannula

Stainless steel wire and threaded plastic cap make a dummy cannula. It can be inserted into guide cannula and fixed by screw to seal the guide cannula and prevent outflow of tissue fluid after injection. The length of the stainless steel wire can be customized.



Metal Cannula

The metal materials avoid biting after the cannula implantation.



Internal cannula

Internal cannula can be fixed into guide cannula through fixing screw and its tail end is connected with PU tube for injections. The length can be customized.



Fixing screw

Fixing screw fixes internal cannula to guide cannula.



PU tube

PU tube connects with the internal cannula on one end and syringe on the other end for drug injection.



Screw

Screw provides the dental cement with a point of strength to prevent it from falling off.



Pharmport

Pharmport connects with PU tube on the one end and with syringes of different sizes on the other end.



Order information (Unit: mm)

Product type	Guide cannula (OD×ID)	Internal cannula (OD×ID)	Dummy cannula		Fixing screw	A	B	Length customization range (mm)			PU tube
			Plastic OD	Metal OD				C	G1	G2	
Single cannula	62001(23G) (0.64×0.45)	62201 (0.41×0.25)	62101 0.4	62106 0.4	62502	0.6	6	1-14.5	0, 0.5-2.5	0, 0.5-1.0	BC-22
	62002(24G) (0.56×0.38)	62202 (0.36×0.20)	62102 0.3	62107 0.3		0.6	6	1-14.5	0, 0.5-2.5	0, 0.5-1.0	
	62003(26G) (0.48×0.34)	62203 (0.30×0.14)	62102 0.3	62107 0.3		0.6	6	1-14.5	0, 0.5-2.5	0, 0.5-1.0	
	62004(27G) (0.41×0.25)	62204 (0.21×0.10)	62104 0.2	62108 0.2		0.6	6	1-14.5	0, 0.5-2.5	0, 0.5-1.0	
	62005(22G) (0.71×0.45)	62201 (0.41×0.25)	62101 0.4	62106 0.4		1	6	1-14.5	0, 0.5-2.5	0, 0.5-1.0	
	62006(22G) (0.71×0.45)	62201 (0.41×0.25)	62101 0.4	62106 0.4		1	8	1-12.5	0, 0.5-2.5	0, 0.5-1.0	BC-22
	62007(23G) (0.64×0.45)	62201 (0.41×0.25)	62101 0.4	62106 0.4		0.6	8	1-12.5	0, 0.5-2.5	0, 0.5-1.0	
	62009(26G) (0.48×0.34)	62203 (0.30×0.14)	62102 0.3	62107 0.3		0.6	8	1-12.5	0, 0.5-2.5	0, 0.5-1.0	
	62010(27G) (0.41×0.25)	62204 (0.21×0.10)	62104 0.2	62108 0.2		0.6	8	1-12.5	0, 0.5-2.5	0, 0.5-1.0	
	62011(22G) (0.71×0.45)	/	62109 0.4	/		5	6	1-14.5		0, 0.5-1.0	BC-22

Product type	Guide cannula (OD×ID)	Internal cannula (OD×ID)	Dummy cannula		Fixing screw	A	B	Length customization range (mm)			PU tube
			Plastic OD	Metal OD				C	G1	G2	
Single cannula	62014(26G) (0.48×0.34)	/	62110 0.3	/	/	5	6	1-14.5		0, 0.5-1.0	BC-25
	62015(27G) (0.41×0.25)	/	62111 0.2	/	/	5	6	1-14.5		0, 0.5-1.0	62300

Order information(Unit:mm)

Series I - Rat/Mouse

Product type	C.C	Guide cannula (OD×ID)	Internal cannula (OD×ID)	Bilateral Cannula Dummies	Cap		Fixing screw	E	Length customization range (mm)		
					Plastic OD	Metal OD			C	G1	G2
Type I (26G) 0.48*0.34	0.6	62022	62250	62122	62523	62525	62521	3.5	1~12	0,0.5~8	0,0.5~3.0
	0.8	62023	62223	62123							
	1.0	62024	62224	62124							
	1.2	62025	62225	62125							
	1.4	62027	62227	62127							
	1.5	62028	62228	62128							
	1.6	62029	62229	62129							
	1.8	62030	62230	62130							
	2.0	62031	62231	62131							
	2.2	62072	62272	62150	62527	62529	62528	5.5			
	2.4	62073	62273	62151							
	2.6	62074	62274	62152							
	3.0	62075	62275	62153							
	3.2	62076	62276	62154							

Series II - Rat

Product type	C.C	Guide cannula (OD×ID)	Internal cannula (OD×ID)	Bilateral Cannula Dummies	Cap		Fixing screw	E	Length customization range (mm)		
					Plastic OD	Metal OD			C	G1	G2
Type II (23G) 0.64*0.45	0.8	62037	62237	62137	62523	62525	62521	3.5	1~18	0,0.5~6	0,0.5~7.0
	1.0	62038	62238	62138							
	1.2	62039	62239	62139							
	1.4	62041	62241	62141							
	1.5	62042	62242	62142							
	1.8	62043	62243	62143	62527	62529	62528	5.5			
	2.0	62077	62277	62155							
	2.2	62078	62278	62156							

Product type	C.C	Guide cannula (OD×ID)	Internal cannula (OD×ID)	Bilateral Cannula Dummies	Cap		Fixing screw	E	Length customization range (mm)		
					Plastic OD	Metal OD			C	G1	G2
Type II (23G) 0.64*0.45	2.4	62079	62279	62157	62527	62529	62528	5.5	1~18	0,0.5~6	0,0.5~7.0
	3.0	62080	62280	62158							
	3.2	62081	62281	62159							

Order information (Unit: mm)

Series III - Mouse

Product type	C.C	Guide cannula (OD×ID)	Internal cannula (OD×ID)	Bilateral Cannula Dummies	Cap		Fixing screw	E	Length customization range (mm)		
					Plastic OD	Metal OD			C	G1	G2
Type III (26G) (0.48×0.34)	0.8	62052	62223	62123	62523	62525	62521	3.5	1~12	0,0.5~8	0,0.5~3.0
	1.0	62053	62224	62124							
	1.2	62054	62225	62125							
	1.4	62056	62227	62127							
	1.5	62057	62228	62128							
	1.8	62058	62229	62129							
	2.0	62059	62230	62130							

Series IV - Mouse

Product type	C.C	Guide cannula (OD×ID)	Internal cannula (OD×ID)	Bilateral Cannula Dummies	Cap		Fixing screw	E	Length customization range (mm)		
					Plastic OD	Metal OD			C	G1	G2
Type IV (27G) 0.41*0.25	0.6	62062	62251	62162	62523	62525	62521	3.5	1~13	0,0.5~1	0,0.5~0.2
	0.8	62063	62263	62163							
	1.0	62064	62264	62164							
	1.2	62065	62265	62165							
	1.4	62067	62267	62167							
	1.5	62068	62268	62168							
	1.6	62069	62269	62169							
	1.8	62070	62270	62170							
	2.0	62071	62271	62171							

Note:

(1) For cap, plastic or metal is optional. Metal cap 62525 (corresponding plastic cap 62523), 62529 (corresponding plastic cap 62527) .

(2) The difference between Seriesland Series III is the height of the pedestal, the former is 7.8mm and latter is 5.5mm, and Series III is specially designed for mice.

(3) For double cannula, the 68205 holder is suitable for a pedestal with a diameter of 3.5mm, whereas the 68230 holder is suitable for one with a diameter of 5.5mm.

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