

Recipient Block Mold Kit Quick-Ray Mold



NOTE

This user guide describes the instruction of Quick Ray[®].

Review this user guide to avoid injury and prevent damage to this product or any products connected to it before you use Quick Ray[®]. To avoid potential hazards, use this product only as specified in this guide.

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Tissue Microarray (TMA) :

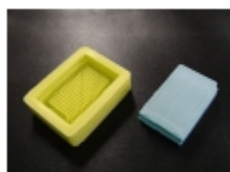
Tissue Microarrays are a collection of multiple tissue cores that are arranged in columns and rows inside a paraffin block allowing for histological analysis. They are a crucial tool in the analysis of gene and protein expression levels in samples from normal and diseased specimens.

Further, they are useful in the early-stage discovery of gene targets in genomic research, validating targets, testing and optimization of diagnostic tests, and in the quality control of molecular detection schemes. And the 'Tissue array' technology not only makes decrease the reagent, time and human resource below one sixtieth but also can be applied to most of the know-how about tissues for immunohistochemistry, in situ hybridization, FISH and in situ PCR.

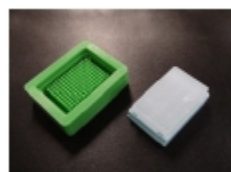
Quick Mold

Recipient block mold kit is an alternative solution for the users to prepare the recipient block by themselves.

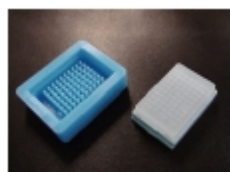
The recipient block can be used to excute TMA works with the manual tissue microarrayer called Quick-Ray. Furthermore, the researchers can prepare the hundreds of recipient blocks from a mold kit. For those who concerns over the price of premade recipient blocks, Quick-Ray Mold Kit is an alternative solution. Made from silicon rubber, Quick-Ray Mold kit allows users to build paraffin recipient blocks by themselves at a lower cost. The core sizes of each mold is perfectly match with punchers of Quick-Ray. If stored and handed with care, hundreds of paraffin recipient blocks can be produced by the Quick-Ray Mold Kit. But this recipient blocks can be applicable only for the manual tissue microarrayer.



Core size : 1mm
170 holes (10 x 17)



Core size : 1.5mm
150 holes (10 x 15)



Core size : 2mm
70 holes (7 x 10)



Core size : 3mm
40 holes (5 x 8)



Core size : 5mm
15 holes (3 x 5)

Specification

Product name	Recipient Block Mold Kit	
Model Number	Core size	Number of cores
UM01-1.0	1.0 mm	170 (10 x 17) holes
UM01-1.5	1.5 mm	150 (10 x 15) holes
UM01-2.0	2.0 mm	70 (7 x 10) holes
UM01-3.0	3.0 mm	40 (5 x 8) holes
UM01-5.0	5.0 mm	15 (3 x 5) holes
Outside Dimension	38 x 50 x 14 mm	
Inside Dimension	25 x 38 x 5.5 mm	
Weight	22g	
Storage temperature	Room temperature	
Material	Silicon	

• How to produce the recipient block by using Quick-Ray Mold Kit

1. Place the Quick-Ray Mold kit in a dry oven for 30 minutes at 70~80°C to warm-up the mold kit.

Note:

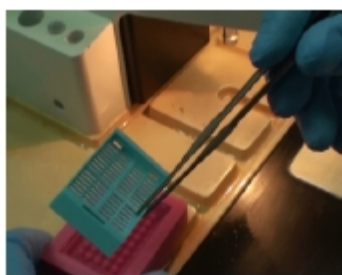
This is strongly recommendable for lengthening durability of the mold kit as well as good quality recipient block.



2. Dispense liquid paraffin (60~65°C) slowly into the mold kit until the top of core rods are fully submerged.

Note:

- 1) Paraffin dispense should be done so slowly that no bubbles are to be formulated among the core rods.
- 2) When some bubbles are formulated, remove them with heated forceps.



3. Place an embedding cassette on the mold kit



4. Dispense enough liquid paraffin into the embedding cassette



5. Solidify the embedding cassette and the mold kit at a normal room temperature or at about 4°C for 30~60 minutes. If solidified at lower temperature, the block may have cracks in it.



6. Separate the mold kit from the embedding cassette slowly and carefully.



7. Trim paraffin around the periphery of the recipient block.



(Pic. Fully completed recipient blocks)



8. Place the reference slide and the paraffin block on microscope stage for position marking with an oil pen.



9. Extract the marked tissue from the paraffin block by using the Quick Ray needle

- 1) Place the paraffin block on a horizontal and flat table.
- 2) Hold the Quick Ray[®] in your hand and tighten your grip.
- 3) Hold the Quick Ray[®] needle perpendicular to the marked position of the paraffin block.
- 4) Insert the Quick Ray[®] needle into the paraffin block at the proper depth of 5mm slowly.



- Don't insert it quickly and too deep to prevent damage to the paraffin block and the Quick Ray needle.
- Quick Ray needle's depth: 5mm



10. Deliver the extracted tissue into the corresponding holes of the recipient block that were pre-made by UNITMA, with Quick Ray needle.



11. Place the block on a glass slide (facing down) incubate the recipient block in an oven at 45 ~ 50°C for 2 hours.

By incubating it, the delivered core adheres to the hole of recipient block, making it easy to cut the recipient block by using Microtome.

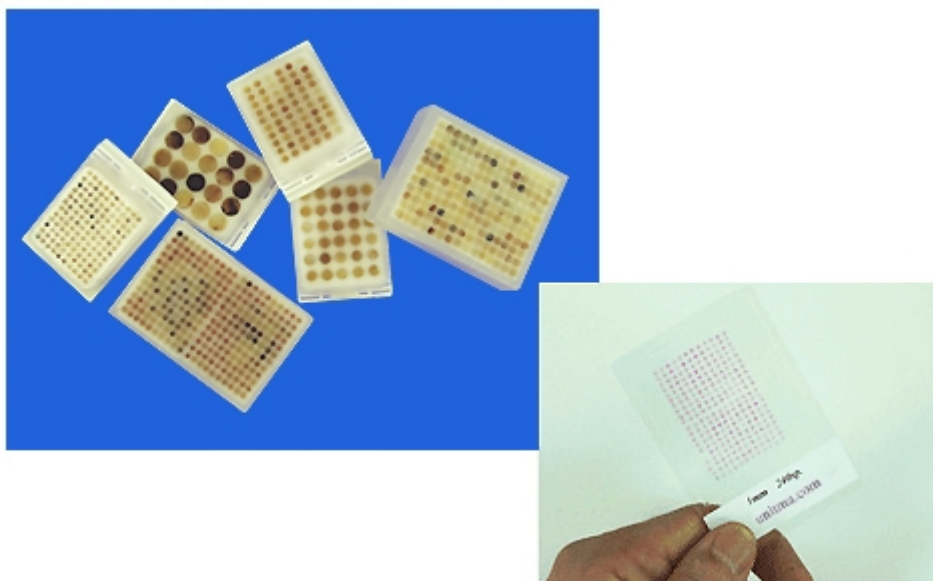
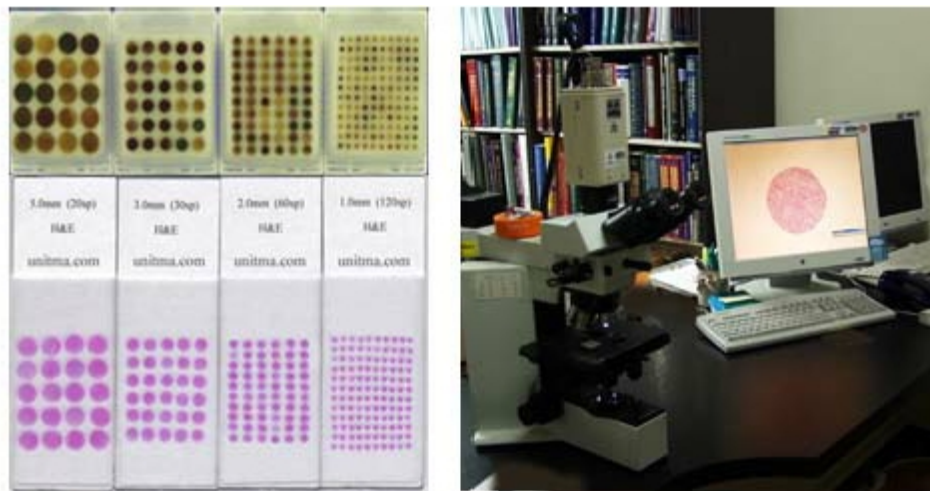


12. Place the block on cold plate.



13. Cutting (about 4µm)

BLOCK & SLIDE



Quick-Ray Manual Tissue Microarrayer

- Portable and easy to handle
- Shortening the TMA work
- Smarter arrayer compared to conventional products
- Easy to carry and to make the array block anytime & anywhere
- Inexperienced pathologist can be easily familiar with the kit
- Simple procedure for creating the blocks
- Easy to create the various sized blocks by using the recipient blocks

Quick Ray set



- 1 puncher
- 5 premade recipient blocks (1, 1.5, 2, 3, 5mm)
- 5 puncher tips (1, 1.5, 2, 3, 5 mm)
- 1 tip guide for the 1mm recipient block
- 1 base mold
- Wooden case
- User manual

Premade recipient block (Consumable)

Unitma provides the premade recipient blocks patented in global to save the valuable time and cost in creating the recipient blocks additionally before starting TMA work. The premade recipient block is made of special material which melts when heated at about 70 °C for 30~60minutes. The blocks have evenly spaced round wells arranged in a square matrix which conforms to digital pathology trend.

Specification

Product name		Premade Recipient Block	
Model Number	Core size	Weight	Number of cores
UB06-10	1.0 mm	3.2g	120 (10 x 12) holes
UB06-15	1.5 mm	2.8g	90 (9 x 10) holes
UB06-20	2.0mm	2.5g	60 (6 x 10) holes
UB06-30	3.0 mm	2.5g	30 (5 x 6) holes
UB06-50	5.0 mm	1.8g	20 (4 x 5) holes
Dimension		24 x 30 x 5.5 mm	
Color and odor		White, odorless	
Physical state and appearance		Solid	
Storage temperature		Room temperature	
Operating temperature		5°C ~35°C	
Composition		Paraffin plus special materials	
Purpose of use		Research purpose only	
Certification		ISO, CE	

Order

Product	Cat. No.	Standard Pack
Quick Ray Set		
Full set of manual tissue microarrayer	UT06	1 set
Single manual TMA set for 1 mm puncher tip with a guide	UT06-T10	1 set
Single manual TMA set for 1.5 mm puncher tip	UT06-T15	1 set
Single manual TMA set for 2.0 mm puncher tip	UT06-T20	1 set
Single manual TMA set for 3.0 mm puncher tip	UT06-T30	1 set
Single manual TMA set for 5.0 mm puncher tip	UT06-T50	1 set
Tip		
MTM puncher tip hole size 1.0mm	UT06-10	1 ea
MTM puncher tip hole size 1.5mm	UT06-15	1 ea
MTM puncher tip hole size 2mm	UT06-20	1 ea
MTM puncher tip hole size 3mm	UT06-30	1 ea
MTM puncher tip hole size 5mm	UT06-50	1 ea
Guide for 1mm recipient block	UG06	1 set
Stainless base mold	UBM06	1ea
Plastic embedding Cassette	UC06	500/PK
Premade recipient block		
1.0mm (10 x 12 ; 120 wells)	UB06-10	1 ea
1.5mm (9 x 10 ; 90 wells)	UB06-15	1 ea
2.0mm (6 x 10 ; 60 wells)	UB06-20	1 ea
3.0mm (5 x 6 ; 30 wells)	UB06-30	1 ea
5.0mm (4 x 5 ; 20 wells)	UB06-50	1 ea
Mold for preparation of the recipient blocks		
1.0mm (10 x 17 ; 170 wells)	UM01-10	1 ea
1.5mm (10 x 15 ; 150 wells)	UM01-15	1 ea
2.0mm (7x 10 ; 70 wells)	UM01-20	1 ea
3.0mm (5 x 8 ; 40 wells)	UM01-30	1 ea
5.0mm (3 x 5 ; 15 wells)	UM01-50	1 ea