

## 【SynVivo Chip 一覧】

IMN1-LC	<b>Simple linear and bifurcating channels for monoculture work</b>
IMN1-SBC	単一細胞培養のためのシンプルな直線形および分岐チャネル
IMN2	<b>Idealized microvascular network for co-culture work (w/2D tissue compartment)</b>
	共培養用の理想的微小血管ネットワーク（二次元組織コンパートメント付き）
IMN2-LC	<b>Idealized linear microvascular network for co-culture (w/2D tissue compartment)</b>
	共培養用の理想的直線形微小血管ネットワーク（二次元組織コンパートメント付き）
IMN3	<b>Idealized microvascular network for co-culture work (w/3D tissue compartment)</b>
	共培養用の理想的微小血管ネットワーク（三次元組織コンパートメント付き）
SMN1	<b>Microvascular networks for monoculture work</b>
	単一細胞培養のための微小血管ネットワーク
SMN2	<b>Microvascular networks for co-culture work (w/2D tissue compartment)</b>
	共培養用の微小血管ネットワーク（二次元組織コンパートメント付き）
SMN3	<b>Microvascular networks for co-culture work (w/3D tissue compartment)</b>
	共培養用の微小血管ネットワーク（三次元組織コンパートメント付き）

**Radial IMN2/IMN3 (slits and pillars)**

**Slit Barrier Option**

このデバイスは、スリットとギャップを利用して、外側チャネルと内側チャンバーの間にバリア領域を形成します。

**Standard design parameters available are:**

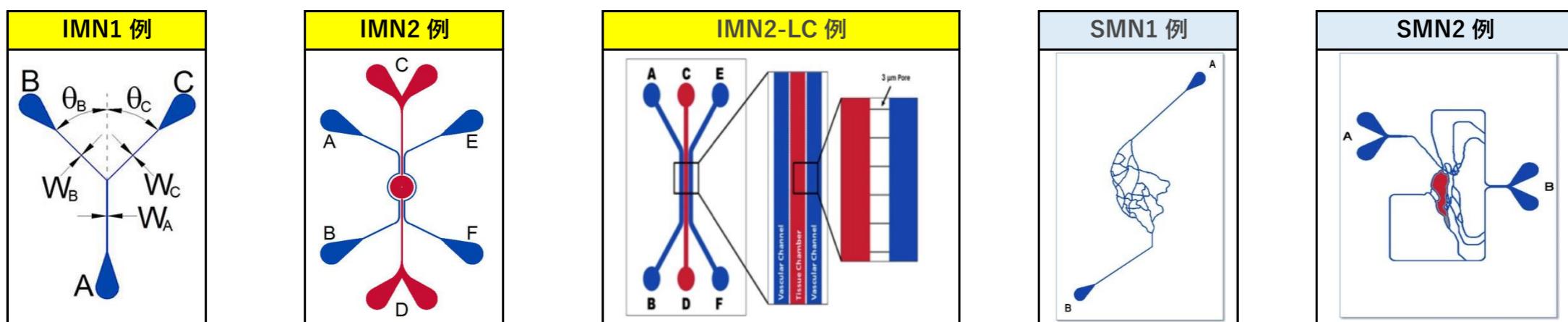
- Outer Channel Width (OC): 100  $\mu\text{m}$  or 200  $\mu\text{m}$
- Travel Width (T): 50  $\mu\text{m}$  or 100  $\mu\text{m}$
- Slit Spacing (SS): 50  $\mu\text{m}$  or 100  $\mu\text{m}$
- Slit Width ( $W_s$ ): Variable

**Pillar Barrier Option**

このデバイスは、ピラー（柱構造）を利用して、外側チャネルと内側チャンバーの間にバリア領域を形成します。

**Standard design parameters available are:**

- Outer Channel Width (OC): 100  $\mu\text{m}$  or 200  $\mu\text{m}$
- Travel Width (T): 50  $\mu\text{m}$  or 100  $\mu\text{m}$
- Pillar Spacing (Gap) (SP): 8  $\mu\text{m}$  or 3  $\mu\text{m}$
- Pillar Diameter ( $D_p$ ): Variable
- Pore sizes available 3  $\mu\text{m}$  or 8  $\mu\text{m}$



<b>Simple linear and bifurcating channels for monoculture work</b>			
Type	Style	カタログ番号	Design Description
IMN1	LC	直線形チャネル(LC)	
		101001-3	3 × 100 $\mu\text{m}$ wide channels, 100 $\mu\text{m}$ depth (Set of 3)
		101002-3	3 × 250 $\mu\text{m}$ wide channels, 100 $\mu\text{m}$ depth (Set of 3)
		101003-3	3 × 500 $\mu\text{m}$ wide channels, 100 $\mu\text{m}$ depth (Set of 3)
	SBC	101004-3	100 $\mu\text{m}$ + 250 $\mu\text{m}$ + 500 $\mu\text{m}$ wide channels, 100 $\mu\text{m}$ depth (Set of 3)
		101005-3	30° Sym (15° + 15°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 100 $\mu\text{m}$ depth (Set of 3)
		101006-3	60° Sym (30° + 30°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 100 $\mu\text{m}$ depth (Set of 3)
		101007-3	90° Sym (45° + 45°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 100 $\mu\text{m}$ depth (Set of 3)
		101008-3	120° Sym (60° + 60°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 100 $\mu\text{m}$ depth (Set of 3)
		101009-3	45° Sym (22.5° + 22.5°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 100 $\mu\text{m}$ depth (Set of 3)
	Cyto-LC	101017-3	30° Sym (15° + 15°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 50 $\mu\text{m}$ depth (Set of 3)
		101018-3	60° Sym (30° + 30°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 50 $\mu\text{m}$ depth (Set of 3)
		101019-3	90° Sym (45° + 45°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 50 $\mu\text{m}$ depth (Set of 3)
		101020-3	120° Sym (60° + 60°) 100 $\mu\text{m}$ parent, 50 $\mu\text{m}$ daughter widths, 50 $\mu\text{m}$ depth (Set of 3)
	Cyto-LC	107001-3	SynVivo for CytoViva Chip: 3 × 1000 $\mu\text{m}$ wide channels, 100 $\mu\text{m}$ depth (Set of 3)

Idealized network chips for co-culture-Radial design			
Type	Model	カタログ番号	Design Description
IMN2	SynTumor	102004-STu3	100 µm OC, 100 µm slit spacing, 2 µm wide slit, 50 µm travel, 100 µm depth (Set of 3)
	SynBBB	102005-3	200 µm OC, 50 µm slit spacing, 3 µm wide slit, 50 µm travel, 100 µm depth (Set of 3)
		102005-SB3	200 µm OC, 50 µm slit spacing, 3 µm wide slit, 50 µm travel, 100 µm depth (Set of 3)
	SynBBB-TEER	102015-SB3	200 µm OC, 50 µm slit spacing, 3 µm wide slit, 50 µm travel, 100 µm depth, w/impedance capability (Set of 3)
	SynTumor	102006-3	200 µm OC, 50 µm slit spacing, 3 µm wide slit, 100 µm travel, 100 µm depth (Set of 3)
	SynRAM	102007-3	200 µm OC, Pillars, 3 µm Gap, 100 µm Travel----3/100 µm (Set of 3)
		102008-SR3	200 µm OC, Pillars, 8 µm Gap, 50 µm Travel----3/100 µm (Set of 3)
		102008-3	200 µm OC, Pillars, 3 µm Pore, 50 µm Travel----100 µm depth (Set of 3)
		102009-3	200 µm OC, Pillars, 3 µm Gap, 50 µm Travel----3/100 µm (Set of 3)
		102010-3	200 µm OC, Pillars, 8 µm Gap, 100 µm Travel----3/100 µm (Set of 3)
		102011-3	200 µm OC, Pillars, 3 µm Gap, 100 µm Travel----8/100 µm (Set of 3)
	SynTumor	102012-STu3	200 µm OC, Pillars, 8 µm Gap, 50 µm Travel ----8/100 µm (Set of 3)
		102012-3	200 µm OC, Pillars, 8 µm Pore, 50 µm Travel----100 µm depth (Set of 3)
	SynTox	102016-3	200 µm OC, 50 µm slit spacing, 2 µm wide slit, 50 µm travel, 100 µm depth (Set of 3)
		102016-STo3	200 µm OC, 50 µm slit spacing, 3 µm wide slit, 50 µm travel, 100 µm depth (Set of 3)
		102017-3	200 µm OC, 50 µm slit spacing, 2 µm wide slit, 100 µm travel, 100 µm depth (Set of 3)

Idealized network chips for co-culture-Linear design			
Type	Model	カタログ番号	Design Description
IMN2 -LC	200-500-200	108007-STu3	200 µm-500 µm-200 µm Channel Widths; 50 µm Travel-5 µm Height Barrier: 5 µm Slits-50 µm Separation, 100 µm Depth (Set of 3)
	SynALI	108011-SA3	200 µm-500 µm-200 µm Channel Widths; 50 µm Travel-3 µm Height Barrier: 3 µm slits-50 µm Separation, 100 µm Depth (Set of 3)
	200-500-200	108011-Stu3	200 µm-500 µm-200 µm Channel Width; 50 µm Travel-3 µm Height Barrier: 3 µm slits-50 µm Separation, 100 µm Depth (Set of 3)
	SynBBB	108011-SB3	200 µm-500 µm-200 µm Channel Width; 50 µm Travel-3 µm Height Barrier: 3 µm slits-50 µm Separation, 100 µm Depth (Set of 3)
	200-500-200	108012-3	200 µm-500 µm-200 µm Channel Widths; 50 µm Travel-3 µm Height Barrier: Pillars, 100 µm Depth (Set of 3)
	500-500-500	108013-3	500 µm-500 µm-500 µm Channel Width; 50 µm Travel, 3 µm slits-50 µm Separation, 100 µm Depth (Set of 3)
	500-500-500	108013-STo3	500 µm-500 µm-500 µm Channel Width; 50 µm Travel, 3 µm slits-50 µm Separation, 100 µm Depth (Set of 3)
	500-500-500	108014-3	500 µm-500 µm-500 µm Channel Width; 50 µm Travel, 20 µm Dia-3 µm Gap Pillars, 100 µm Depth (Set of 3)

Idealized network chips for co-culture-Radial design with 3D tissue chamber			
Type	カタログ番号	Design Description	
IMN3	103002-3	200 µm OC, Pillars, 3 µm gap, 100 µm travel, 100 µm depth; Chamber: 25 µm Diameter, 50 µm Separation; Barrier: 3 µm barrier height, 3 µm Separation (Set of 3)	
	103003-3	200 µm OC, Pillars, 8 µm Ggap, 50 µm travel, 100 µm depth (Set of 3)	
	103004-3	200 µm OC, Pillars, 8 µm gap, 100 µm travel, 100 µm depth; Chamber: 25 µm Diameter, 50 µm Separation; Barrier: 3 µm barrier height, 8 µm gap (Set of 3)	
	103006-3	100 µm OC, 100 µm travel, 100 µm depth; Chamber pillars – 25 µm Diameter, 50 µm Separation; Barrier slits – 25 µm Diameter, 50 µm Separation (Set of 3)	
	103007-3	100 µm OC, 20 µm travel, 100 µm depth; Slit barrier- 2 µm barrier height, 2 µm slits, 50 µm separation; Central chamber- 25 µm pillars, 50 µm separation (Set of 3)	

Microvascular Network Chips for Monoculture			
Type	Style	カタログ番号	Design Description
SMN1	C001	104001-3	Network 001, 100 µm depth (Set of 3)
	D001	104002-3	Network 002, 100 µm depth (Set of 3)
	C002	104003-3	Network 003, 100 µm depth (Set of 3)
	C003	104004-3	Network 004, 100 µm depth (Set of 3)
	C004	104005-3	Network 005, 100 µm depth (Set of 3)
	C005	104006-3	Network 006, 100 µm depth (Set of 3)
	C006	104007-3	Network 007, 100 µm depth (Set of 3)
	C007	104008-3	Network 008, 100 µm depth (Set of 3)
	D002	104009-3	Network 009, 100 µm depth (Set of 3)
	D003	104010-3	Network 010, 100 µm depth (Set of 3)
	D004	104011-3	Network 011, 100 µm depth (Set of 3)
	D005	104012-3	Network 012, 100 µm depth (Set of 3)
	D006	104013-3	Network 013, 100 µm depth (Set of 3)
	D007	104014-3	Network 014, 100 µm depth (Set of 3)

Microvascular Network Chips for Co-Culture			
Type	Style	カタログ番号	Design Description
SMN2	C001/SynRAM	105001-3	3 μm Height Barrier: 10 μm Dia-50 μm Separation, 100 μm Depth (Set of 3)
	D001	105002-3	3 μm Height Barrier: 10 μm Dia-50 μm Separation, 100 μm Depth (Set of 3)
	C001	105003-3	3 μm Height Barrier: 20 μm Dia-3 μm Separation, 100 μm Depth (Set of 3)
	D001	105004-3	3 μm Height Barrier: 20 μm Dia-3 μm Separation, 100 μm Depth (Set of 3)
	C001	105005-3	2 μm Height Barrier: 10 μm Dia-50 μm Separation, 100 μm Depth (Set of 3)
	D001	105006-3	2 μm Height Barrier: 10 μm Dia-50 μm Separation, 100 μm Depth (Set of 3)
	C001/SynTumor	105007-STu3	2 μm Height Barrier: 20 μm Dia-3 μm Separation, 100 μm Depth (Set of 3)
	D001	105008-3	2 μm Height Barrier: 20 μm Dia-3 μm Separation, 100 μm Depth (Set of 3)
	C002/SynTumor	105011-3	8 μm Height Barrier: 20 μm Dia-30 μm Separation, 100 μm Height (3 chamber) (Set of 3)
		105015-STu3	8 μm Height Barrier: 10 μm Dia-50 μm Separation, 100 μm Height (1 chamber) (Set of 3)

SMN3 chips (3D tissue chamber)			
Type	Style	カタログ番号	Design Description
SMN3	C001	106003-3	2 μm Height Barrier: 20 μm Diam-3 μm Separation, 25 μm Dia-50 μm Separation Chamber pillars, 100 μm Depth (Set of 3)
	D001	106004-3	2 μm Height Barrier: 20 μm Diam-3 μm Separation, 25 μm Dia-50 μm Separation Chamber pillars, 100 μm Depth (Set of 3)

Multi-chambered chips for studying the effect of high and low perfusion			
高灌流と低灌流の効果を研究するためのマルチチャンバーチップ			
Type	Style	カタログ番号	Design Description
SMN3	C002	106009-3	8 μm Height Barrier: 20 μm Dia-30 μm Separation, 25 μm Dia-50 μm Separation Chamber pillars, 100 μm Height (Set of 3)
	D002	106010-3	8 μm Height Barrier: 20 μm Dia-30 μm Separation, 25 μm Dia-50 μm Separation Chamber pillars, 100 μm Height (Set of 3)

Tandem-co-culture chips used for real time visualization and quantitation of tumor metastasis			
腫瘍転移のリアルタイム視覚化と定量化に使用されるタンデム共培養チップ			
Type	Style	カタログ番号	Design Description
SMN3	SMN3 - JN1-100 Tandem (SMN3×2)	106013-3	Barrier Pillars-20 μm diameter- 10 μm gap between pillars; Tissue chambers: 25 μm diameter pillars and 50 μm gap between pillars; 100 μm height (Set of 3)

