



Cat No: **BRC962 – Breast cancer tissue array**

Lot#	Cores	Size	Cut	Format	QA/QC		
BRC96201	96	1.5mm	4um	8X12	H&E, IHC anti-Cytokeratin		

**Recommended applications:** For Research use only. RNA or protein breast cancer/non-tumor tissue profiling using IHC or ISH; Antibody characterization.

**Description:** Breast cancer tissue array, 96 cores, non-overlapping with BRC961, including 36 cases (purple/blue) of breast cancers and 12 cases of normal, reactive and benign tumor tissues of the breast (pink) in duplicates. All the tissues were from surgical resection. They were fixed in 10% neutral buffered formalin for 24 hours and processed using identical SOPs. Sections were picked onto Superfrost Plus or APES coated Superfrost slides. They all have a guaranteed six months' shelf-life at 4C from the date of shipment. Each slide has >95% tissue core retention.

Array position	Age	Sex	Histology	Grade	Stage (TNM)	AR	ER	PR	HER2
A1,B1	50	F	Normal			+, 1%	++, 2%	+++, 2%	-
A2,B2	47	F	Normal/hyperplasia			+, 5%	+, 1%	+++, 2%	-
A3,B3	40	F	Normal/hyperplasia			-	-	++, 2%	-
A4,B4	32	F	Normal/hyperplasia			++, 5%	++, 1%	-	-
A5,B5	50	F	Granuloma			-	-	-	-
A6,B6	30	F	Granuloma			-	-	-	-
A7,B7	50	F	Fibrocystic changes			++, 5%	++, 1%	-	+
A8,B8	43	F	Fibrocystic changes			+, 2%	+, 5%	-	-
A9,B9	25	F	Fibroadenoma			++~++++, 30%	+++, 30%	+++, 15%	+~++++
A10,B10	20	F	Fibroadenoma			++, 20%	++~++++, 30%	+++, 50%	+
A11,B11	21	F	Fibroadenoma			++, 50%	+++, 80%	+++, 60%	+
A12,B12	50	F	Fibroadenoma			+, 10%	++, 15%	+++, 30%	+
C1,D1	43	F	Intra-ductal carcinoma	I	TisNOMO	-	-	-	+++
C2,D2	60	F	Intra-ductal carcinoma	I	TisNOMO	-	-	-	+++
C3,D3	37	F	Intra-ductal carcinoma	I	TisNOMO	++, 10%	++~++++, 80%	++~++++, 50%	+~+++
C4,D4	41	F	Lobular carcinoma in situ	I	TisNOMO	-	+, 20%	+++, 80%	+
C5,D5	30	F	Phyllodes sarcoma			-	-	-	-
C6,D6	48	F	Invasive ductal carcinoma	II	T1NOMO	++, 50%	++~++++, 60%	+++, 80%	-
C7,D7	44	F	Invasive ductal carcinoma	II~III	T1NOMO	-	-	-	+++
C8,D8	61	F	Invasive ductal carcinoma	II~III	T1NOMO	+~+++ 30%	+++, 100%	++, 50%	+
C9,D9	40	F	Invasive ductal carcinoma	II~III	T1NOMO	+~+++ 30%	++, 60%	++~++++, 80%	++
C10,D10	38	F	Invasive ductal carcinoma	I~II	T1NOMO	+, 15%	+, 15%	++, 30%	++~++++
C11,D11	43	F	Invasive ductal carcinoma	III	T2NOMO	-	+, 20%	++, 30%	-
C12,D12	48	F	Invasive ductal carcinoma	II	T2NOMO	-	+~+++ 50%	++~++++, 80%	-
E1,F1	62	F	Invasive ductal carcinoma	II~III	T2NOMO	-	+++, 90%	+++, 60%	+



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E2,F2	47	F	Invasive ductal carcinoma	II~III	T2N2MO	-	++, 50%	++, 30%	+
E3,F3	59	F	Invasive ductal carcinoma	III	T2NOMO	-	-	-	-
E4,F4	72	F	Invasive ductal carcinoma	I~II	T2N1MO	-	-	-	-
E5,F5	36	F	Invasive lobular carcinoma	III	T2N2MO	-	-	-	+++
E6,F6	48	F	Invasive ductal carcinoma	II~III	T2NOMO	-	-	-	+++
E7,F7	44	F	Invasive ductal carcinoma	II~III	T2NOMO	-	+~+++, 50%	-	-
E8,F8	56	F	Invasive ductal carcinoma	I~II	T2NOMO	++, 5%	-	-	+++
E9,F9	50	F	Invasive ductal carcinoma	II	T2N1MO	-	-	-	++~+++
E10,F10	50	F	Invasive ductal carcinoma	II~III	T2NOMO	++, 5%	+++ , 80%	+++ , 80%	+
E11,F11	83	F	Mucinous carcinoma		T4NOMO	+~+++, 10%	+++ , 80%	++ , 50%	+
E12,F12	64	F	Invasive lobular carcinoma	III	T2NOMO	-	++~+++, 80%	++ , 20%	-
G1,H1	58	F	Invasive ductal carcinoma	II	T2N1MO	-	-	-	-
G2,H2	32	F	Invasive ductal carcinoma	II~III	T3N1MO	-	-	++ , 20%	++~+++
G3,H3	60	F	Invasive ductal carcinoma	II~III	T4NOMO	-	-	-	+++
G4,H4	58	F	Invasive ductal carcinoma	III	T1NOMO	-	-	-	-
G5,H5	54	F	Invasive ductal carcinoma	II~III	T3N3MO	-	-	-	++~+++
G6,H6	33	F	Invasive lobular carcinoma	III	T4NOMO	++ , 20%	+++ , 80%	+++ , 50%	-
G7,H7	51	F	Invasive lobular carcinoma	II~III	T4NOMO	++ , 30%	+++ , 80%	-	-
G8,H8	55	F	Invasive ductal carcinoma	III	T3N1MO	-	+++ , 80%	+++ , 50%	-
G9,H9	36	F	Invasive ductal carcinoma	II~III	T3N1MO	++ , 30%	++ , 60%	++~+++, 60%	+++
G10,H10	42	F	Invasive ductal carcinoma	II~III	T3NOMO	+ , 2%	+~+++, 50%	-	+~++
G11,H11	36	F	Invasive ductal carcinoma	II	T4NOMO	++ , 5%	+++ , 90%	+++ , 100%	+
G12,H12	36	F	Squamous cell carcinoma?	I~II	T3N1MO	-	-	-	+++

**Notes:** Bake at 60C for 30 minutes before use. If antigen retrieving is needed, it is always a good idea to start with a protocol with weak to mild strength.

**Staining Scoring:** "-" – no staining; "+-" – borderline staining; "+" – weak staining; "++" – moderate staining; "+++" – strong staining; "%" – percentage of positive cells.

**Certified by:** Fancai Li, M.D.



## **TNM Classification: Breast carcinoma**

### **T- Primary tumor**

TX - Primary tumor cannot be assessed

TO - No evidence of primary tumor

Tis - Carcinoma in situ, intraductal carcinoma or lobular carcinoma in situ, or Paget's disease of the nipple with no tumor

T1 - Tumor 2 cm or less in greatest dimension

T2 - Tumor more than 2 cm but not more than 5 cm in greatest dimension

T3 - Tumor more than 5 cm in greatest dimension

T4 - Tumor of any size with direct extension to chest wall or skin

### **N - Regional lymph nodes**

NX - Regional lymph nodes cannot be assessed

NO - No regional lymph node metastasis

N1 - Metastasis to movable ipsilateral lymph node(s)

N2 - Metastasis to ipsilateral lymph nodes(s) fixed to one another or to other structure

N3 - Metastasis to ipsilateral internal mammary lymph node(s)

### **M - Distant metastasis**

MX - Distant metastasis cannot be assessed

MO - No distant metastasis

M1 - Distant metastasis

TNM classification of malignant tumours, Fifth Edition (1997)