



Cat No: **BRC961C_F – Breast cancer tissue array**

Lot#	Cores	Size	Cut	Format	QA/QC		
BRC96101	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 for replacement of BRC961, 96 cores, 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			+~+++, 30%	+~+++, 15%	-	-
A2,B2	43	F	Normal			+~+++, 20%	+, 5%	++, 15%	++
A3,B3	50	F	Normal			+~+++, 20%	+~+++, 15%	+, 5%	-
A4,B4	30	F	Periductal mastitis			+~+++, 20%	+~+++, 5%	++, 5%	-
A5,B5	52	F	Hyperplasia			-	+~+++, 10%	++, 10%	-
A6,B6	38	F	Hyperplasia			-	+~+++, 5%	++, 5%	-
A7,B7	41	F	Hyperplasia			+, 20%	+, 15%	++, 20%	-
A8,B8	40	F	Fibrocystic changes			+~+++, 20%	+~+++, 15%	+~+++, 20%	+
A9,B9	41	F	Fibrocystic changes			+, 20%	+~+++, 15%	++~++++, 30%	+
A10,B10	39	F	Fibroadenoma			+, 5%	+~+++, 5%	+~+++, 10%	+
A11,B11	16	F	Fibroadenoma			+, 50%	++~++++, 80%	++~++++, 80%	+-
A12,B12	34	F	Fibroadenoma			+~+++, 30%	++~++++, 20%	++~++++, 20%	+
C1,D1	38	F	Phyllodes sarcoma		TisNOMO	+~+++, 10%	+~+++, 10%	++~++++, 50%	+~+++
C2,D2	52	F	Intraductal carcinoma	I	TisNOMO	+-	+++ , 80%	-	++~+++
C3,D3	33	F	Intraductal carcinoma	I	TisNOMO	+-	++, 20%	++~++++, 50%	++~+++
C4,D4	37	F	Invasive ductal carcinoma (partially intraductal carcinoma)	I-II	T3N1M1	+~+++, 20%	++~++++, 60%	++~++++, 50%	+
C5,D5	53	F	Intraductal carcinoma	I	TisNOMO	+, 15%	-	-	+++
C6,D6	61	M	Ductal papillary adenocarcinoma	I-II	T2NOMO	+, 15%	+~+++, 20%	+~+++, 10%	+
C7,D7	41	F	Invasive ductal carcinoma	II	T2NOMO	++, 5%	++, 5%	++~++++, 10%	+



Advancing Biomedical Science Through Tissue Arrays

C8,D8	55	F	Invasive ductal carcinoma	III	T3N2M0	+~+++, 5%	+, 50%	+~+++, 5%	+
C9,D9	44	F	Invasive ductal carcinoma	II~III	T3N0M0	-	-	-	-
C10,D10	72	F	Invasive ductal carcinoma	II	T2N0M0	+++, 20%	-	-	++~+++ +
C11,D11	41	F	Invasive ductal carcinoma	II	T3N2M0	-	+, 5%	-	+++
C12,D12	18	F	Invasive ductal carcinoma	II~III	T2N0M0	+~	+~+++, 5%	+~+++, 5%	+
E1,F1	31	F	Invasive ductal carcinoma	II~III	T2N0M0	+~	-	-	+++
E2,F2	54	F	Invasive ductal carcinoma	II	T2N0M0	-	-	-	+++
E3,F3	75	F	Invasive ductal carcinoma	III	T3N0M0	+++, 30%	+, 10%	+~+++, 10%	-
E4,F4	30	F	Invasive ductal carcinoma	I~II	T3N0M0	-	-	+~+++, 5%	-
E5,F5	43	F	Invasive ductal carcinoma	III	T3N0M0	-	-	-	-
E6,F6	37	F	Invasive ductal carcinoma	III	T2N0M0	-	-	+~+++, 5%	+++
E7,F7	42	F	Invasive ductal carcinoma	II~III	T4N2MX	-	+, 50%	++~++++, 60%	+
E8,F8	30	F	Invasive ductal carcinoma	II	T2N0M0	-	-	-	-
E9,F9	39	F	Invasive ductal carcinoma	I~II	T3N0M0	-	++~++++, 50%	+~+++, 50%	+~
E10,F10	46	F	Invasive ductal carcinoma	III	T2N0M0	+~	+, 5%	-	+
E11,F11	40	F	Invasive ductal carcinoma	II	T3N1M0	-	+, 10%	+~+++, 10%	-
E12,F12	58	F	Invasive ductal carcinoma	II	T3N0M0	-	-	-	++~+++ +
G1,H1	35	F	Invasive ductal carcinoma	III	T2N0M0	++~+++ +, 60%	++~++++, 30%	+~+++, 10%	+++
G2,H2	53	F	Invasive ductal carcinoma	II~III	T2N0M0	++~+++ +, 10%	+~+++, 10%	-	+++
G3,H3	50	F	Invasive ductal carcinoma	II~III	T4N3M1	-	+, 5%	+, 5%	+
G4,H4	48	F	Invasive ductal carcinoma	II~III	T2N0M0	+, 5%	++~++++, 30%	++~++++, 50%	+~
G5,H5	51	F	Invasive ductal carcinoma	II	T3N1M0	+~	++, 50%	+~+++, 15%	-
G6,H6	43	F	Invasive ductal carcinoma	II~III	T4N2MX	-	-	-	+++
G7,H7	43	F	Invasive ductal carcinoma	II~III	T3N1M0	+~	-	-	+~++
G8,H8	40	F	Invasive ductal carcinoma	III	T3N0M0	-	-	-	+++
G9,H9	47	F	Invasive ductal carcinoma	III	T3N1M0	-	-	-	++~+++ +
G10,H10	49	F	Invasive ductal carcinoma	II~III	T3N1M0	+~+++, 5%	++~++++, 20%	++~++++, 60%	+
G11,H11	58	F	Invasive mucinous adenocarcinoma		T3N2M0	-	-	-	+~++
G12,H12	40	F	Invasive lobular carcinoma	III	T2N0M0	+~	++~++++, 50%	+~+++, 15%	-

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)