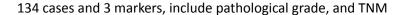
MBB3: Breast Tumour Tissue Array (Human)

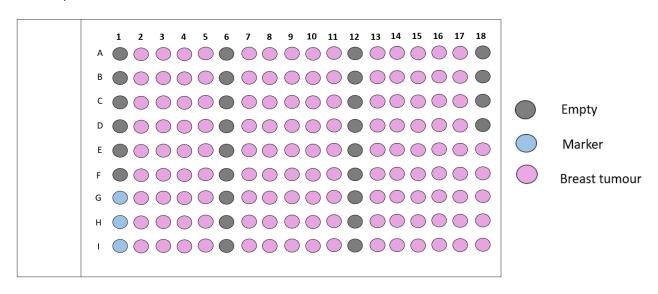




Description

Product code	MBB3			
Cases	134			
Row number	18			
Column number	9			
Core diameter (mm)	0.6			
Thickness	4μm			
Tissue array type	FFPE			
Species	Human			
Application	 Immunohistochemistry In situ hybridization Fluorescent in situ hybridization Terminal deoxynucleotidyl transferase dUTP nick-end labeling (TUNEL) analysis In situ polymerase chain reaction (In situ PCR) 			
Notes	 Storage temperature : 4°C Shipping temperature : Ambient 			

TMA Map:



Position	Age	Gender	Pathology diagnosis	TNM	Grade	Type of tumour
A1						
A2	72	F	Invasive ductal carcinoma	T1c NX MX	2	Malignant
A3	71	F	Invasive ductal carcinoma	N/A	2	Malignant
A4	48	F	Invasive ductal carcinoma	T1c N3a MX	3	Malignant
A5	58	F	Invasive ductal carcinoma	T1c N1a MX	3	Malignant
A6						
A7	54	F	Invasive ductal carcinoma	T1c NX MX	2	Malignant
A8	72	F	Invasive ductal carcinoma	T1b NX MX	2	Malignant
A9	42	F	Invasive ductal carcinoma	T3 N2a MX	3	Malignant
A10	45	F	Invasive ductal carcinoma	N/A	3	Malignant
A11	42	F	Invasive ductal carcinoma	T2 N1 M0	3	Malignant
A12						
A13	67	F	Invasive ductal carcinoma	T1b NX MX	2	Malignant
A14	49	F	Invasive ductal carcinoma	N/A	3	Malignant
A15	56	F	Invasive ductal carcinoma	T1c N2a MX	3	Malignant
A16	48	F	Metastatic ductal carcinoma	T0 N3a MX	3	Malignant
A17	50	F	Invasive ductal carcinoma	T2 N2a MX	3	Malignant
A18						
B1						
B2	60	F	Invasive ductal carcinoma	T1c N1a MX	2	Malignant
B3	79	F	Invasive ductal carcinoma	N/A	2	Malignant
B4	40	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
B5	68	F	Invasive ductal carcinoma	N/A	3	Malignant
B6						
B7	43	F	Invasive ductal carcinoma	T1c NX MX	2	Malignant
B8	48	F	Invasive ductal carcinoma	T4b N3a MX	2	Malignant
B9	65	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
B10	47	F	Invasive ductal carcinoma	T4b N3a MX	3	Malignant
B11	51	F	Invasive ductal carcinoma	T2/T1c N3a MX	3	Malignant
B12				1		
B13	42	F	Invasive ductal carcinoma	N/A	2	Malignant
B14	65	T _F	Invasive ductal carcinoma	T2 N1a MX	3	Malignant
B15	60	F	Invasive ductal carcinoma	N/A	3	Malignant
B16	45	F	Invasive ductal carcinoma	N/A	3	Malignant
B17	36	F	Invasive ductal carcinoma	N/A	2	Malignant
B18			The state of the s	1.7	_	
C1						
C2	68	F	Invasive ductal carcinoma	T2 N3 MX	2	Malignant
C3	71	F	Invasive lobular carcinoma	N/A	2	Malignant
C4	64	F	Invasive ductal carcinoma	T2 N1 MX	3	Malignant
C5	55	F	Invasive ductal carcinoma	T2 N3 MX	3	Malignant
	33	1	mivasive ductal calcillottia	12 143 1417	J	ivialignant
	82	E	Invasive ductal carcinoma	T2 N12 N/V	2	Malignant
						Malignant
				+	_	-
	_					Malignant
	_					Malignant Malignant
C6 C7 C8 C9 C10	82 46 57 57 56	F F F F	Invasive ductal carcinoma	T2 N1a MX T2 N3a MX T1c NX MX N/A T2 N1a MX	2 2 3 3 3 3	

C12						
C13	36	F	Invasive ductal carcinoma	N/A	2	Malignant
C14	70	F	Invasive ductal carcinoma	N/A	3	Malignant
C15	48	F	Invasive ductal carcinoma	T4b N3a MX	3	Malignant
C16	58	F	Invasive ductal carcinoma	N/A	3	Malignant
C17	69	F	Encysted papillary carcinoma and invasive ductal carcinoma	T2 N0 M0	2	Malignant
C18						
D1						
D2	76	F	Invasive ductal carcinoma	N/A	2	Malignant
D3	58	F	Invasive ductal carcinoma	T2 N2 MX	2	Malignant
D4	53	F	Invasive ductal carcinoma	T2 N1 MX	3	Malignant
D5	50	F	Invasive ductal carcinoma	N/A	3	Malignant
D6						
D7	62	F	Invasive ductal carcinoma	T4 N0 MX	3	Malignant
D8	63	F	Invasive ductal carcinoma	T2 N3 MX	2	Malignant
D9	48	F	Invasive ductal carcinoma	N/A	3	Malignant
D10	41	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
D11	47	F	Invasive ductal carcinoma	N/A	3	Malignant
D12						
D13	45	F	Invasive ductal carcinoma	T1c N0 MX	3	Malignant
D14	39	F	Invasive ductal carcinoma	T2 NX MX	2	Malignant
D15	62	F	Invasive ductal carcinoma	T2 N3a MX	3	Malignant
D16	36	F	Invasive ductal carcinoma	N/A	3	Malignant
D17	61	F	Invasive ductal carcinoma	T4b N1a MX	3	Malignant
D18						
E1						
E2	69	F	Invasive ductal carcinoma	T4b N2a MX	2	Malignant
E3	52	F	Invasive ductal carcinoma	T2 N0 M0	2	Malignant
E4	42	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
E5	49	F	Invasive ductal carcinoma	N/A	3	Malignant
E6						
E7	56	F	Invasive ductal carcinoma	T2 N0 MX	1	Malignant
E8	62	F	Invasive ductal carcinoma	T2 N2 MX	2	Malignant
E9	66	F	Invasive ductal carcinoma	N/A	2	Malignant
E10	52	F	Invasive ductal carcinoma	T1c N0 MX	3	Malignant
E11	51	F	Invasive ductal carcinoma	N/A	3	Malignant
E12						
E13	40	F	Invasive ductal carcinoma	N/A	3	Malignant
E14	50	F	Invasive ductal carcinoma	T1c NX MX	2	Malignant
E15	53	F	Invasive ductal carcinoma	T2 N2 MX	3	Malignant
E16	45	F	Invasive ductal carcinoma	N/A	N/A	Malignant
E17	67	F	Invasive ductal carcinoma	T1c N0 M0	2	Malignant
E18	72	F	Mucinous carcinoma	T2 N0 MX	2	Malignant
F1						
F2	47	F	Invasive ductal carcinoma	N/A	1	Malignant
F3	49	F	Invasive ductal carcinoma	N/A	2	Malignant
F4	58	F	Invasive ductal carcinoma	T1c N3a MX	3	Malignant
F5	81	F	Invasive ductal carcinoma	T1c NX MX	3	Malignant

F6						
F7	54	F	Invasive ductal carcinoma	T1c NX MX	2	Malignant
F8	61	F	Invasive ductal carcinoma	T2 N0 MX	2	Malignant
F9	63	F	Invasive ductal carcinoma	T2 NX MX	2	Malignant
F10	40	F	Invasive ductal carcinoma	N/A	3	Malignant
F11	56	F	Invasive ductal carcinoma	T1c N1a MX	3	Malignant
F12						Ĭ
F13	54	F	Invasive ductal carcinoma	N/A	2	Malignant
F14	44	F	Invasive ductal carcinoma	T1c N3a MX	3	Malignant
F15	63	F	Metaplastic carcinosarcoma	T3 NX MX	3	Malignant
F16	86	F	Invasive ductal carcinoma	N/A	2	Malignant
F17	50	F	Invasive ductal carcinoma	N/A	3	Malignant
F18	39	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
G1	Marke	er		•	•	,
G2	51	F	Invasive lobular carcinoma	T2 N0 MX	1	Malignant
G3	63	F	Invasive ductal carcinoma	T2 N0 MX	2	Malignant
G4	64	F	Invasive ductal carcinoma	N/A	2	Malignant
G5	55	F	Invasive ductal carcinoma	N/A	3	Malignant
G6						
G7	27	F	Invasive ductal carcinoma	T2 N2a MX	3	Malignant
G8	51	F	Invasive lobular carcinoma	T1c NX MX	2	Malignant
G9	45	F	Invasive ductal carcinoma	T2 N2 MX	2	Malignant
G10	64	F	Invasive ductal carcinoma	T2 N1 MX	3	Malignant
G11	72	F	Invasive ductal carcinoma	T1c N0 M0	3	Malignant
G12						
G13	42	F	Invasive ductal carcinoma	T2 N0 MX	2	Malignant
G14	61	F	Invasive ductal carcinoma	N1a	2	Malignant
G15	53	F	Invasive ductal carcinoma	T1c NX MX	2	Malignant
G16	38	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
G17	38	F	Invasive ductal carcinoma	T2 N1 MX	2	Malignant
G18	61	F	Invasive ductal carcinoma	T2 N2a MX	3	Malignant
H1	Marke	er				
H2	52	F	Invasive ductal carcinoma	N/A	3	Malignant
Н3	61	F	Invasive ductal carcinoma	N/A	2	Malignant
H4	79	F	Invasive ductal carcinoma	N/A	3	Malignant
H5	66	F	Invasive ductal carcinoma	T4b N3a MX	3	Malignant
Н6						
H7	61	F	Invasive ductal carcinoma	T2 N1a MX	3	Malignant
Н8	41	F	Invasive ductal carcinoma	N/A	2	Malignant
H9	42	F	Invasive ductal carcinoma	N/A	2	Malignant
H10	41	F	Invasive ductal carcinoma	T1c N2a M0	3	Malignant
H11	58	F	Invasive ductal carcinoma	T2 N3a MX	3	Malignant
H12						
H13	53	F	Invasive ductal carcinoma	T2 N2 M0	3	Malignant
H14	53	F	Invasive ductal carcinoma	N/A	3	Malignant
H15	45	F	Invasive ductal carcinoma	T1c N0 MX	3	Malignant
H16	52	F	DCIS	N/A	N/A	Malignant
H17	78	F	Invasive ductal carcinoma	T1c N0 MX	2	Malignant
H18	56	F	Invasive ductal carcinoma	T1b N0 MX	2	Malignant

l1	Mark	er				
12	39	F	DCIS	N/A	N/A	Malignant
13	46	F	Invasive ductal carcinoma	T2 N1 MX	2	Malignant
14	53	F	Invasive ductal carcinoma	N/A	2	Malignant
15	74	F	Invasive ductal carcinoma	T2 N0 M0	3	Malignant
16						
17	58	F	Invasive ductal carcinoma	T2 N2a M0	3	Malignant
18	52	F	Invasive ductal carcinoma	T2 N0 MX	2	Malignant
19	47	F	Invasive ductal carcinoma	T4b N1a MX	2	Malignant
110	53	F	Invasive ductal carcinoma	N/A	3	Malignant
l11	56	F	Invasive ductal carcinoma	T1c N0 MX	3	Malignant
l12						
I13	35	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
114	67	F	Invasive lobular carcinoma	T1c NX MX	2	Malignant
I15	59	F	Invasive ductal carcinoma	T1c N0 M0	3	Malignant
116	60	F	Invasive ductal carcinoma	N/A	3	Malignant
117	45	F	Invasive ductal carcinoma	N/A	3	Malignant
I18	62	F	Invasive ductal carcinoma	T2 N2a MX	3	Malignant

Stage description

The American Joint Committee on Cancer (AJCC) TNM system is the frequently employed breast cancer staging system, and it is based on seven important elements:

- The extent (size) of the tumor (T): How large is the cancer? Has it grown into nearby areas?
- The spread to nearby lymph nodes (N): Has the cancer spread to nearby lymph nodes? If so, how many?
- The spread (metastasis) to distant sites (M): Has the cancer spread to distant organs such as the lungs or liver?
- Grade of the cancer (G): How much do the cancer cells look like normal cells?
 - Estrogen Receptor (ER) status: Does the cancer have the protein called an estrogen receptor?
 - **Progesterone Receptor (PR) status:** Does the cancer have the protein called a progesterone receptor?
 - **HER2 status:** Does the cancer make too much of a protein called HER2?

Tumor (T)

T1: Tumour ≤ 20 mm in greatest dimension.

T1a: Tumor > 1 mm but \leq 5 mm in greatest dimension (round any measurement >1.0-1.9 mm to 2 mm).

T1b: Tumor > 5 mm but ≤ 10 mm in greatest dimension

T1c: Tumor > 10 mm but ≤ 20 mm in greatest dimension

T2: Tumour > 20 mm but \leq 50 mm in greatest dimension.

T3: Tumour > 50 mm in greatest dimension.

T4: Tumor of any size growing into the chest wall or skin. This includes inflammatory breast cancer.

T4a: Extension to chest wall, not including only pectoralis muscle adherence/invasion

T4b: Ulceration and/or ipsilateral satellite nodules and/or edema (including peau d'orange)

of the skin, which do not meet the criteria for inflammatory carcinoma.

T4c: Both T4a and T4b.

T4d: Inflammatory carcinoma.

Nodes (N)

NX: Nearby lymph nodes cannot be assessed.

NO: No regional lymph node metastasis identified histologically.

N1: Micrometastases; or metastases in 1-3 axillary lymph nodes and/or in internal mammary nodes; and/or in clinically negative internal mammary nodes with micrometastases or macrometastases by sentinel lymph node biopsy.

N1a: Metastases in 1-3 axillary lymph nodes (at least 1 metastasis > 2.0 mm).

N1b: Metastases in ipsilateral internal mammary lymph nodes, excluding ITCs, detected by sentinel lymph node biopsy

N1c: Combination of N1a and N1b

N2: Metastases in 4-9 axillary lymph nodes; or positive ipsilateral internal mammary lymph nodes by imaging in the absence of axillary lymph node metastases.

N2a: Metastases in 4-9 axillary lymph nodes (at least 1 tumor deposit > 2.0 mm).

N2b: Metastases in one or more internal mammary lymph nodes, causing them to become enlarged.

N3: Any of the following:

N3a: Metastases in \geq 10 axillary lymph nodes (at least 1 tumor deposit > 2.0 mm); or metastases to the infraclavicular (level III axillary lymph) nodes.

N3b: Metastases in at least one axillary lymph nodes (at least 1 tumor deposit > 2.0 mm) and has enlarged the internal mammary lymph nodes; or metastases in 4 or more axillary lymph nodes (at least 1 tumor deposit > 2.0 mm) and in the internal mammary lymph nodes on sentinel lymph node biopsy.

N3c: Cancer has spread to the lymph nodes above the collarbone (supraclavicular nodes) on the same side of the cancer with at least one area of cancer spread greater than 2 mm.

Metastasis (M)

 $\boldsymbol{\mathsf{M0}}\xspace$. No clinical or radiographic evidence of distant metastasis .

M1: Any histologically proven metastases in distant organs; or if in non-regional nodes, metastases > 0.2 mm.

Mx: Distant metastasis cannot be assessed.