

MBB7: Triple Negative Breast Tumour Tissue Array (Human)

47 cases and 3 markers, include pathological grade, and TNM



Description:

Product code	MBB7
Cases	47
Row number	8
Column number	9
Core diameter (mm)	0.6
Thickness	4µm
Tissue array type	FFPE
Species	Human
Application	<ul style="list-style-type: none">ImmunohistochemistryIn situ hybridizationFluorescent in situ hybridizationTerminal deoxynucleotidyl transferase dUTP nick-end labelling (TUNEL) analysisIn situ polymerase chain reaction (In situ PCR)
Notes	<ul style="list-style-type: none">Storage Temperature: 4°CShipping temperature: Ambient

TMA map:

	1	2	3	4	5	6	7	8	9
A									
B									
C									
D									
E									
F									
G									
H									

Empty
 Marker
 Breast tumour

Patient Information:

Position	Age	Gender	Pathology diagnosis	TNM	Grade	Type of tumour
A1	Marker					
A2	Marker					
A3	Marker					
A4						
A5						
A6						
A7						
A8						
A9						
B1	43	F	Invasive breast carcinoma	T2 N1a MX	3	Malignant
B2	46	F	Invasive breast carcinoma	T2 N1a	3	Malignant
B3	49	F	Invasive breast carcinoma	T2 N0 MX	3	Malignant
B4	30	F	Invasive breast carcinoma	T1c	3	Malignant
B5	58	F	Invasive breast carcinoma	T3 N3 MX	2	Malignant
B6	60	F	Invasive breast carcinoma	T1c N0 MX	2	Malignant
B7	57	F	Invasive breast carcinoma	T1c	3	Malignant
B8	41	F	Invasive breast carcinoma	T1c N2a MX	3	Malignant
B9	47	F	Invasive breast carcinoma	T2	3	Malignant
C1	64	F	Invasive breast carcinoma	T2 N1 MX	3	Malignant
C2	42	F	Invasive breast carcinoma	T3 N1 MX	3	Malignant
C3	72	F	Invasive breast carcinoma	T1c N0 MX	3	Malignant
C4	37	F	Invasive breast carcinoma	T2 N1 MX	3	Malignant
C5	69	F	Invasive breast carcinoma	T2 N0 MX	3	Malignant
C6	45	F	Invasive breast carcinoma	T1c N0 MX	3	Malignant
C7	62	F	Invasive breast carcinoma	T1c	3	Malignant
C8	51	F	Invasive breast carcinoma	T2 N2 MX	2	Malignant
C9	49	F	Invasive breast carcinoma	T2	3	Malignant
D1	71	F	Invasive breast carcinoma	N/A	3	Malignant
D2	63	F	Metaplastic carcinoma with carcino sarcoma	T3	3	Malignant
D3	45	F	Invasive breast carcinoma	N/A	3	Malignant
D4	50	F	Invasive breast carcinoma	N/A	3	Malignant
D5	46	F	Invasive breast carcinoma	T2	3	Malignant
D6	66	F	Invasive breast carcinoma	T3 N2a MX	3	Malignant
D7	55	F	Invasive breast carcinoma	T2	3	Malignant
D8	49	F	Invasive breast carcinoma	T2	3	Malignant
D9	58	F	Invasive breast carcinoma	T2 N0 MX	3	Malignant
E1						
E2						
E3						
E4						
E5						
E6						
E7						
E8						
E9						
F1	47	F	Invasive breast carcinoma	T4b N1a MX	3	Malignant
F2	52	F	Invasive breast carcinoma	T2 N0 MX	3	Malignant
F3	51	F	Invasive breast carcinoma	N/A	3	Malignant
F4	59	F	Invasive breast carcinoma	T2	3	Malignant
F5	56	F	Medullary carcinoma	T2 N1a MX	N/A	Malignant

F6	49	F	Invasive breast carcinoma	T2 N0 MX	3	Malignant
F7	49	F	Invasive breast carcinoma	T1c	3	Malignant
F8	43	F	Residual invasive ductal carcinoma	T3	3	Malignant
F9	62	F	Invasive breast carcinoma	T2 N0 MX	3	Malignant
G1	38	F	Invasive breast carcinoma	T2	2	Malignant
G2	65	F	Invasive breast carcinoma	T1c N0 MX	3	Malignant
G3	46	F	Invasive breast carcinoma	T1c	3	Malignant
G4	60	F	Metaplastic carcinoma	T1c N0 MX	3	Malignant
G5	45	F	Invasive breast carcinoma	T2	3	Malignant
G6	39	F	Invasive breast carcinoma	T1c	3	Malignant
G7	54	F	Invasive breast carcinoma	T3 N2a MX	2	Malignant
G8	59	F	Invasive breast carcinoma	N/A	N/A	Malignant
G9	37	F	Invasive breast carcinoma	T3 N0 MX	3	Malignant
H1	43	F	Invasive breast carcinoma	N/A	3	Malignant
H2	66	F	Invasive breast carcinoma	T2 N2a MX	3	Malignant
H3						
H4						
H5						
H6						
H7						
H8						
H9						

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 \leq 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 \leq 10 mm in greatest dimension

T1c: Tumor $>$ 10 mm but \leq 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.

N0: 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 ≥ 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)

M0: 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.