
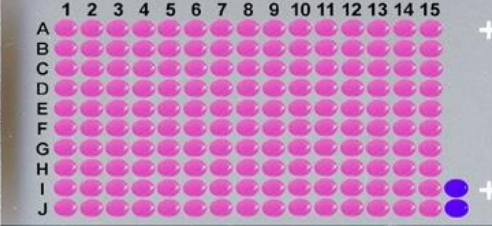


Cat No: BRC1503 - Breast cancer tissue array

| Lot# | Cores | Size | Cut | Format | QA/QC | | |
|-----------|-------|-------|-----|--------|----------------------------------|---|--|
| BRC150301 | 150 | 1.1mm | 4um | 10X15 | 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, set 3, non-overlapping with BRC1501, BRC1502, BRC1504 to BRC15011, 150 cores from normal-benign (5 cases) and cancer (70 cases) tissues in duplicates with grading, TNM staging data, AR, ER, PR, HER2, P53, EGFR, Ki67 IHC data.

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 can be stored for use at 4C for up to six months from the date of shipment. **There may be 5 to 10% of tissue core loss.**

| Array Position | Sex | Age | Anatomic Site | Pathology | Grade | Stage |
|----------------|-----|-----|---------------|----------------------------|--------|---------|
| A01 | F | 26 | Breast | Normal | null | null |
| A02 | F | 45 | Breast | Adenosis | null | null |
| A03 | F | 35 | Breast | Adenosis | null | null |
| A04 | F | 23 | Breast | Fibroadenoma | null | null |
| A05 | F | 40 | Breast | Fibrocystic changes | null | null |
| A06 | F | 45 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| A07 | F | 42 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| A08 | F | 32 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| A09 | F | 48 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| A10 | F | 44 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| A11 | F | 50 | Breast | Invasive ductal carcinoma | III | T2N0M0 |
| A12 | F | 63 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| A13 | F | 42 | Breast | Invasive lobular carcinoma | II~III | T2N0M0 |
| A14 | F | 46 | Breast | Invasive ductal carcinoma | III | T2N0M0 |
| A15 | F | 34 | Breast | Invasive lobular carcinoma | II | T2N1M0 |
| B01 | F | 26 | Breast | Normal | null | null |
| B02 | F | 45 | Breast | Adenosis | null | null |
| B03 | F | 35 | Breast | Adenosis | null | null |
| B04 | F | 23 | Breast | Fibroadenoma | null | null |
| B05 | F | 40 | Breast | Fibrocystic changes | null | null |
| B06 | F | 45 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| B07 | F | 42 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| B08 | F | 32 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| B09 | F | 48 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| B10 | F | 44 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| B11 | F | 50 | Breast | Invasive ductal carcinoma | III | T2N0M0 |
| B12 | F | 63 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| B13 | F | 42 | Breast | Invasive lobular carcinoma | II~III | T2N0M0 |
| B14 | F | 46 | Breast | Invasive ductal carcinoma | III | T2N0M0 |
| B15 | F | 34 | Breast | Invasive lobular carcinoma | II | T2N1M0 |
| C01 | F | 53 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| C02 | F | 25 | Breast | Lobular carcinoma in situ | null | TisN0M0 |
| C03 | F | 45 | Breast | Invasive lobular carcinoma | II~III | T2N0M0 |
| C04 | F | 44 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| C05 | F | 38 | Breast | Invasive ductal carcinoma | I~II | T2N0M0 |
| C06 | F | 70 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| C07 | F | 56 | Breast | Invasive ductal carcinoma | I | T3N1M0 |
| C08 | F | 52 | Breast | Ductal carcinoma in situ | I | TisN0M0 |
| C09 | F | 68 | Breast | Invasive ductal carcinoma | II~III | T1N0M0 |



Advancing Biomedical Science Through Tissue Arrays

| | | | | | | |
|-----|---|----|--------|--|--------|---------|
| C10 | F | 68 | Breast | Invasive ductal carcinoma | II~III | T3N1M0 |
| C11 | F | 46 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| C12 | F | 52 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| C13 | F | 59 | Breast | Invasive ductal carcinoma | II~III | T3N1M0 |
| C14 | F | 39 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| C15 | F | 40 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| D01 | F | 53 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| D02 | F | 25 | Breast | Lobular carcinoma in situ | null | TisN0M0 |
| D03 | F | 45 | Breast | Invasive lobular carcinoma | II~III | T2N0M0 |
| D04 | F | 44 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| D05 | F | 38 | Breast | Invasive ductal carcinoma | I~II | T2N0M0 |
| D06 | F | 70 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| D07 | F | 56 | Breast | Invasive ductal carcinoma | I | T3N1M0 |
| D08 | F | 52 | Breast | Ductal carcinoma in situ | I | TisN0M0 |
| D09 | F | 68 | Breast | Invasive ductal carcinoma | II~III | T1N0M0 |
| D10 | F | 68 | Breast | Invasive ductal carcinoma | II~III | T3N1M0 |
| D11 | F | 46 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| D12 | F | 52 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| D13 | F | 59 | Breast | Invasive ductal carcinoma | II~III | T3N1M0 |
| D14 | F | 39 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| D15 | F | 40 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| E01 | F | 40 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| E02 | F | 63 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| E03 | F | 50 | Breast | Invasive ductal carcinoma | II~III | T1N0M0 |
| E04 | F | 45 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| E05 | F | 46 | Breast | Invasive ductal carcinoma | I~II | T2N1M0 |
| E06 | F | 39 | Breast | Invasive ductal carcinoma | I~II | T2N1M0 |
| E07 | F | 48 | Breast | Invasive ductal carcinoma | II~III | T1N0M0 |
| E08 | F | 41 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| E09 | F | 61 | Breast | Lobular carcinoma in situ | null | TisN0M0 |
| E10 | F | 86 | Breast | Invasive ductal carcinoma with apocrine features | III | T2N0M0 |
| E11 | F | 34 | Breast | Invasive ductal carcinoma | II~III | T3N3M0 |
| E12 | F | 64 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| E13 | F | 35 | Breast | Invasive lobular carcinoma | I | T2N1M0 |
| E14 | F | 44 | Breast | Invasive ductal carcinoma, tubular type | II | T2N1M0 |
| E15 | F | 54 | Breast | Invasive ductal carcinoma | II | T1N0M0 |
| F01 | F | 40 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| F02 | F | 63 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| F03 | F | 50 | Breast | Invasive ductal carcinoma | II~III | T1N0M0 |
| F04 | F | 45 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| F05 | F | 46 | Breast | Invasive ductal carcinoma | I~II | T2N1M0 |
| F06 | F | 39 | Breast | Invasive ductal carcinoma | I~II | T2N1M0 |
| F07 | F | 48 | Breast | Invasive ductal carcinoma | II~III | T1N0M0 |
| F08 | F | 41 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| F09 | F | 61 | Breast | Lobular carcinoma in situ | null | TisN0M0 |
| F10 | F | 86 | Breast | Invasive ductal carcinoma with apocrine features | III | T2N0M0 |
| F11 | F | 34 | Breast | Invasive ductal carcinoma | II~III | T3N3M0 |
| F12 | F | 64 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| F13 | F | 35 | Breast | Invasive lobular carcinoma | I | T2N1M0 |
| F14 | F | 44 | Breast | Invasive ductal carcinoma, tubular type | II | T2N1M0 |
| F15 | F | 54 | Breast | Invasive ductal carcinoma | II | T1N0M0 |
| G01 | F | 40 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| G02 | F | 58 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| G03 | F | 55 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| G04 | F | 74 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| G05 | F | 50 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| G06 | F | 53 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| G07 | F | 53 | Breast | Invasive ductal carcinoma | I~II | T2N0M0 |
| G08 | F | 71 | Breast | Invasive ductal carcinoma | II | T4N0M0 |
| G09 | F | 48 | Breast | Invasive ductal carcinoma | I~II | T2N0M0 |
| G10 | F | 43 | Breast | Invasive ductal carcinoma | II | T2N0M0 |



Advancing Biomedical Science Through Tissue Arrays

| | | | | | | |
|-----|---|----|--------|----------------------------|--------|---------|
| G11 | F | 34 | Breast | Ductal carcinoma in situ | I | TisN0M0 |
| G12 | F | 52 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| G13 | F | 55 | Breast | Invasive ductal carcinoma | II | T2N1M0 |
| G14 | F | 54 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| G15 | F | 40 | Breast | Invasive ductal carcinoma | II | T2N1M0 |
| H01 | F | 40 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| H02 | F | 58 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| H03 | F | 55 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| H04 | F | 74 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| H05 | F | 50 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| H06 | F | 53 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| H07 | F | 53 | Breast | Invasive ductal carcinoma | I~II | T2N0M0 |
| H08 | F | 71 | Breast | Invasive ductal carcinoma | II | T4N0M0 |
| H09 | F | 48 | Breast | Invasive ductal carcinoma | I~II | T2N0M0 |
| H10 | F | 43 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| H11 | F | 34 | Breast | Ductal carcinoma in situ | I | TisN0M0 |
| H12 | F | 52 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| H13 | F | 55 | Breast | Invasive ductal carcinoma | II | T2N1M0 |
| H14 | F | 54 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| H15 | F | 40 | Breast | Invasive ductal carcinoma | II | T2N1M0 |
| I01 | F | 34 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| I02 | F | 59 | Breast | Invasive ductal carcinoma | II~III | T1N0M0 |
| I03 | F | 76 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| I04 | F | 39 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| I05 | F | 33 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| I06 | F | 52 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| I07 | F | 72 | Breast | Invasive ductal carcinoma | II~III | T4N0M0 |
| I08 | F | 35 | Breast | Invasive ductal carcinoma | I~II | T3N1M0 |
| I09 | F | 60 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| I10 | F | 37 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| I11 | F | 53 | Breast | Invasive ductal carcinoma | II~III | T3N0M0 |
| I12 | F | 52 | Breast | Invasive lobular carcinoma | II~III | T1N0M0 |
| I13 | F | 71 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| I14 | F | 70 | Breast | Tubular mixed carcinoma | II~III | T1N0M0 |
| I15 | F | 44 | Breast | Ductal carcinoma in situ | null | TisN0M0 |
| J01 | F | 34 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| J02 | F | 59 | Breast | Invasive ductal carcinoma | II~III | T1N0M0 |
| J03 | F | 76 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| J04 | F | 39 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| J05 | F | 33 | Breast | Invasive ductal carcinoma | II~III | T2N1M0 |
| J06 | F | 52 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| J07 | F | 72 | Breast | Invasive ductal carcinoma | II~III | T4N0M0 |
| J08 | F | 35 | Breast | Invasive ductal carcinoma | I~II | T3N1M0 |
| J09 | F | 60 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| J10 | F | 37 | Breast | Invasive ductal carcinoma | II~III | T2N0M0 |
| J11 | F | 53 | Breast | Invasive ductal carcinoma | II~III | T3N0M0 |
| J12 | F | 52 | Breast | Invasive lobular carcinoma | II~III | T1N0M0 |
| J13 | F | 71 | Breast | Invasive ductal carcinoma | II | T2N0M0 |
| J14 | F | 70 | Breast | Tubular mixed carcinoma | II~III | T1N0M0 |
| J15 | F | 44 | Breast | Ductal carcinoma in situ | null | TisN0M0 |

Notes: Bake at 60C for ~60 minutes before use. If antigen retrieving is needed, it is important to avoid **direct-boiling and high pH or high strength** antigen retrieving buffer. For availability of complimentary IHC data, please contact us at info@pantomics.com.



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)