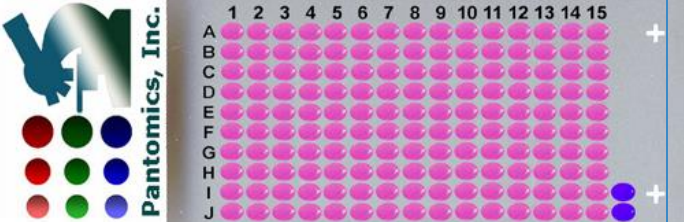


Cat No: LUC1502 - Lung cancer tissue array

| Lot# | Cores | Size | Cut | Format | QA/QC | Pantomics, Inc. | |
|-----------|-------|-------|-----|--------|----------------------------------|------------------------------------------------------------------------------------|--|
| LUC150201 | 150 | 1.1mm | 4um | 10X15 | H&E, IHC anti- Cytokeratin |  | |

Recommended applications: For Research use only. RNA or protein lung cancer/normal tissue profiling using IHC or ISH; Antibody characterization.

Description: Lung cancer tissue array, 150 cores, non-overlapping with LUC1501, including 75 cases of normal, inflammatory and common types of lung cancer 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 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 | M | 19 | Lung | Normal | null | null |
| A02 | F | 53 | Lung | Normal lung | null | null |
| A03 | M | 61 | Lung | Chronic pneumonia | null | null |
| A04 | M | 56 | Lung | Chronic bronchitis | null | null |
| A05 | M | 56 | Lung | Tuberculosis, TB granuloma | null | null |
| A06 | M | 57 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| A07 | F | 46 | Lung | Papillary adenocarcinoma | II~III | T3N1M0 |
| A08 | M | 66 | Lung | Squamous cell carcinoma | III | T2N2M0 |
| A09 | M | 62 | Lung | Small cell carcinoma | null | T2N0M0 |
| A10 | M | 50 | Lung | Squamous cell carcinoma | II~III | T2N1M0 |
| A11 | M | 58 | Lung | Small cell carcinoma | null | T2N1M0 |
| A12 | M | 50 | Lung | Squamous cell carcinoma | II | T2N0M0 |
| A13 | F | 19 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| A14 | M | 73 | Lung | Squamous cell carcinoma | III | T1N0M0 |
| A15 | M | 39 | Lung | Undifferentiated carcinoma | null | T2N1M0 |
| B01 | M | 19 | Lung | Normal | null | null |
| B02 | F | 53 | Lung | Normal lung | null | null |
| B03 | M | 61 | Lung | Chronic pneumonia | null | null |
| B04 | M | 56 | Lung | Chronic bronchitis | null | null |
| B05 | M | 56 | Lung | Tuberculosis, TB granuloma | null | null |
| B06 | M | 57 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| B07 | F | 46 | Lung | Papillary adenocarcinoma | II~III | T3N1M0 |
| B08 | M | 66 | Lung | Squamous cell carcinoma | III | T2N2M0 |
| B09 | M | 62 | Lung | Small cell carcinoma | null | T2N0M0 |
| B10 | M | 50 | Lung | Squamous cell carcinoma | II~III | T2N1M0 |
| B11 | M | 58 | Lung | Small cell carcinoma | null | T2N1M0 |
| B12 | M | 50 | Lung | Squamous cell carcinoma | II | T2N0M0 |
| B13 | F | 19 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| B14 | M | 73 | Lung | Squamous cell carcinoma | III | T1N0M0 |
| B15 | M | 39 | Lung | Undifferentiated carcinoma | null | T2N1M0 |
| C01 | F | 60 | Lung | Squamous cell carcinoma | III | T2N1M0 |
| C02 | M | 49 | Lung | Adenosquamous carcinoma | null | T1N0M0 |
| C03 | F | 21 | Lung | Leiomyosarcoma | null | null |
| C04 | F | 50 | Lung | Mesothelioma | null | null |
| C05 | M | 74 | Lung | Adenosquamous carcinoma | null | T2N1M0 |
| C06 | M | 63 | Lung | Squamous cell carcinoma | II~III | T2N0M0 |
| C07 | M | 48 | Lung | Undifferentiated carcinoma, large cell | null | T2N1M0 |
| C08 | F | 62 | Lung | Squamous cell carcinoma | II~III | T2N0M0 |
| C09 | M | 62 | Lung | Small cell carcinoma | null | T2N0M0 |
| C10 | M | 60 | Lung | Adenocarcinoma | II | T2N0M0 |

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| | | | | | | |
|-----|---|----|------|----------------------------------------|--------|--------|
| C11 | M | 65 | Lung | Sarcoma | null | null |
| C12 | F | 64 | Lung | Adenocarcinoma | II | T4N1M0 |
| C13 | M | 58 | Lung | Adenocarcinoma | III | T2N0M0 |
| C14 | M | 70 | Lung | Squamous cell carcinoma | I~II | T2N0M0 |
| C15 | F | 67 | Lung | Adenosquamous carcinoma | null | T2N1M0 |
| D01 | F | 60 | Lung | Squamous cell carcinoma | III | T2N1M0 |
| D02 | M | 49 | Lung | Adenosquamous carcinoma | null | T1N0M0 |
| D03 | F | 21 | Lung | Leiomyosarcoma | null | null |
| D04 | F | 50 | Lung | Mesothelioma | null | null |
| D05 | M | 74 | Lung | Adenosquamous carcinoma | null | T2N1M0 |
| D06 | M | 63 | Lung | Squamous cell carcinoma | II~III | T2N0M0 |
| D07 | M | 48 | Lung | Undifferentiated carcinoma, large cell | null | T2N1M0 |
| D08 | F | 62 | Lung | Squamous cell carcinoma | II~III | T2N0M0 |
| D09 | M | 62 | Lung | Small cell carcinoma | null | T2N0M0 |
| D10 | M | 60 | Lung | Adenocarcinoma | II | T2N0M0 |
| D11 | M | 65 | Lung | Sarcoma | null | null |
| D12 | F | 64 | Lung | Adenocarcinoma | II | T4N1M0 |
| D13 | M | 58 | Lung | Adenocarcinoma | III | T2N0M0 |
| D14 | M | 70 | Lung | Squamous cell carcinoma | I~II | T2N0M0 |
| D15 | F | 67 | Lung | Adenosquamous carcinoma | null | T2N1M0 |
| E01 | M | 62 | Lung | Squamous cell carcinoma | II | T3N0M0 |
| E02 | M | 53 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| E03 | M | 54 | Lung | Mesothelioma | null | null |
| E04 | M | 66 | Lung | Bronchioloalveolar carcinoma | null | T1N0M0 |
| E05 | M | 69 | Lung | Squamous cell carcinoma | II~III | T2N1M0 |
| E06 | M | 60 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| E07 | M | 51 | Lung | Small cell carcinoma | null | T2N2M0 |
| E08 | M | 69 | Lung | Squamous cell carcinoma | I | T2N1M0 |
| E09 | M | 45 | Lung | Squamous cell carcinoma | III | T2N1M0 |
| E10 | M | 69 | Lung | Undifferentiated carcinoma, large cell | null | T2N0M0 |
| E11 | M | 70 | Lung | Squamous cell carcinoma | II | T2N1M0 |
| E12 | M | 60 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| E13 | M | 50 | Lung | Adenocarcinoma | II | T2N0M0 |
| E14 | M | 49 | Lung | Adenocarcinoma | II | T2N1M0 |
| E15 | M | 70 | Lung | Squamous cell carcinoma | II | T2N1M0 |
| F01 | M | 62 | Lung | Squamous cell carcinoma | II | T3N0M0 |
| F02 | M | 53 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| F03 | M | 54 | Lung | Mesothelioma | null | null |
| F04 | M | 66 | Lung | Bronchioloalveolar carcinoma | null | T1N0M0 |
| F05 | M | 69 | Lung | Squamous cell carcinoma | II~III | T2N1M0 |
| F06 | M | 60 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| F07 | M | 51 | Lung | Small cell carcinoma | null | T2N2M0 |
| F08 | M | 69 | Lung | Squamous cell carcinoma | I | T2N1M0 |
| F09 | M | 45 | Lung | Squamous cell carcinoma | III | T2N1M0 |
| F10 | M | 69 | Lung | Undifferentiated carcinoma, large cell | null | T2N0M0 |
| F11 | M | 70 | Lung | Squamous cell carcinoma | II | T2N1M0 |
| F12 | M | 60 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| F13 | M | 50 | Lung | Adenocarcinoma | II | T2N0M0 |
| F14 | M | 49 | Lung | Adenocarcinoma | II | T2N1M0 |
| F15 | M | 70 | Lung | Squamous cell carcinoma | II | T2N1M0 |
| G01 | M | 78 | Lung | Adenocarcinoma | II~III | T2N0M0 |
| G02 | M | 56 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| G03 | M | 65 | Lung | Adenocarcinoma | II~III | T2N0M0 |
| G04 | M | 57 | Lung | Bronchioloalveolar carcinoma | null | T2N0M0 |
| G05 | M | 66 | Lung | Neuroendocrine carcinoma | null | T2N0M0 |
| G06 | M | 52 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| G07 | F | 51 | Lung | Undifferentiated carcinoma, large cell | null | T2N2M0 |
| G08 | M | 42 | Lung | Bronchioloalveolar carcinoma | null | T2N1M0 |
| G09 | F | 44 | Lung | Small cell carcinoma | null | T2N1M0 |
| G10 | M | 50 | Lung | Undifferentiated carcinoma | null | T2N0M0 |
| G11 | M | 42 | Lung | Bronchioloalveolar carcinoma | null | T2N0M0 |



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| | | | | | | |
|-----|---|----|------|----------------------------------------|--------|--------|
| G12 | F | 43 | Lung | Squamous cell carcinoma | I~II | T2N0M0 |
| G13 | M | 66 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| G14 | M | 50 | Lung | Squamous cell carcinoma | II | T4N1M0 |
| G15 | M | 54 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| H01 | M | 78 | Lung | Adenocarcinoma | II~III | T2N0M0 |
| H02 | M | 56 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| H03 | M | 65 | Lung | Adenocarcinoma | II~III | T2N0M0 |
| H04 | M | 57 | Lung | Bronchioloalveolar carcinoma | null | T2N0M0 |
| H05 | M | 66 | Lung | Neuroendocrine carcinoma | null | T2N0M0 |
| H06 | M | 52 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| H07 | F | 51 | Lung | Undifferentiated carcinoma, large cell | null | T2N2M0 |
| H08 | M | 42 | Lung | Bronchioloalveolar carcinoma | null | T2N1M0 |
| H09 | F | 44 | Lung | Small cell carcinoma | null | T2N1M0 |
| H10 | M | 50 | Lung | Undifferentiated carcinoma | null | T2N0M0 |
| H11 | M | 42 | Lung | Bronchioloalveolar carcinoma | null | T2N0M0 |
| H12 | F | 43 | Lung | Squamous cell carcinoma | I~II | T2N0M0 |
| H13 | M | 66 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| H14 | M | 50 | Lung | Squamous cell carcinoma | II | T4N1M0 |
| H15 | M | 54 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| I01 | M | 60 | Lung | Bronchioloalveolar carcinoma | null | T2N1M0 |
| I02 | M | 41 | Lung | Squamous cell carcinoma | II | T2N1M0 |
| I03 | M | 76 | Lung | Squamous cell carcinoma | II | T2N0M0 |
| I04 | M | 77 | Lung | Squamous cell carcinoma | II~III | T2N1M0 |
| I05 | F | 51 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| I06 | M | 46 | Lung | Mucinous Adenocarcinoma | null | T2N0M0 |
| I07 | M | 56 | Lung | Squamous cell carcinoma | I | T2N1M0 |
| I08 | M | 50 | Lung | Adenosquamous carcinoma | null | T2N0M0 |
| I09 | M | 74 | Lung | Squamous cell carcinoma | II | T2N2M0 |
| I10 | M | 70 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| I11 | M | 51 | Lung | Squamous cell carcinoma | III | T4N1M0 |
| I12 | M | 55 | Lung | Adenosquamous carcinoma | null | T2N1M0 |
| I13 | M | 62 | Lung | Squamous cell carcinoma | I~II | T2N1M0 |
| I14 | M | 58 | Lung | Squamous cell carcinoma | II | T2N0M0 |
| I15 | M | 50 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| J01 | M | 60 | Lung | Bronchioloalveolar carcinoma | null | T2N1M0 |
| J02 | M | 41 | Lung | Squamous cell carcinoma | II | T2N1M0 |
| J03 | M | 76 | Lung | Squamous cell carcinoma | II | T2N0M0 |
| J04 | M | 77 | Lung | Squamous cell carcinoma | II~III | T2N1M0 |
| J05 | F | 51 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| J06 | M | 46 | Lung | Mucinous Adenocarcinoma | null | T2N0M0 |
| J07 | M | 56 | Lung | Squamous cell carcinoma | I | T2N1M0 |
| J08 | M | 50 | Lung | Adenosquamous carcinoma | null | T2N0M0 |
| J09 | M | 74 | Lung | Squamous cell carcinoma | II | T2N2M0 |
| J10 | M | 70 | Lung | Squamous cell carcinoma | III | T2N0M0 |
| J11 | M | 51 | Lung | Squamous cell carcinoma | III | T4N1M0 |
| J12 | M | 55 | Lung | Adenosquamous carcinoma | null | T2N1M0 |
| J13 | M | 62 | Lung | Squamous cell carcinoma | I~II | T2N1M0 |
| J14 | M | 58 | Lung | Squamous cell carcinoma | II | T2N0M0 |
| J15 | M | 50 | Lung | Squamous cell carcinoma | III | T2N0M0 |

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: Langxing Pan, M.D.

TNM Classification: Lung carcinoma

T- Primary tumor

- TX - Primary tumor cannot be assessed or tumor proven by the presence of malignant cell in sputum or bronchial washing but not visualized by imaging of bronchoscopy;
- TO - No evidence of primary tumor;
- Tis- Carcinoma in situ;
- T1 - Tumor 3 cm or less in greatest dimension, surrounded by lung or visceral pleura without bronchoscopic evidence of invasion more proximal than lobular bronchus;
- T2 - Tumor with any of the following features of size or extent; more than 3 cm in greatest dimension; involves main bronchus, 2 cm more proximal to carina; invades visceral pleura; associated with atelectasis or obstructive pneumonitis that extends to the hilar region but not involve the entire lung;
- T3 - Tumor of any size that directly invades any of the followings: chest wall (including superior sulcus tumor), diaphragm, mediastinal pleura, parietal pericardium; tumors in the main bronchus less than 3 cm distal to the carina; associated with atelectasis or obstructive pneumonitis of entire lung;
- T4 - Tumor of any size that invades any of the following: mediastinum, heart, great vessel, trachea, esophagus, vertebral body, carina, separate tumor nodule(s) in the same lobe; tumor with malignant pleural effusion.

N - Regional lymph nodes

- NX - Regional lymph nodes cannot be assessed;
- NO - No regional lymph node metastasis;
- N1 - Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension;
- N2 - Metastasis in ipsilateral mediastinal and/or subcarinal lymph nodes;
- N3 - Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph nodes.

M - Distant metastasis

- MX - Distant metastasis cannot be assessed MO - No distant metastasis;
- M1 - Distant metastasis, including separate tumor nodule(s) in a different lobe (ipsilateral or contralateral).