



Cat No: **LUC481** - Lung cancer/adjacent paired tissue array

Lot#	Cores	Size	Cut	Format	QA/QC	Pantomics, Inc.	
LUC48101	48	2mm	4um	6X8	H&E, IHC anti-Cytokeratin		

Recommended applications: For Research use only. Designed for lung normal vs cancer RNA or protein tissue profiling using IHC or ISH. Duplicated tumor tissues from each case are arrayed to minimize heterogeneity.

Description: 16 cases covering all the common types of lung cancer (purple), each in duplicates, with uninvolved lung tissues (pink) from the same patients as controls.

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	47	Lung	Adenocarcinoma	I~II	T2N0M0
A02	M	59	Lung	Adenocarcinoma	II	T2N0M0
A03	M	65	Lung	Small cell carcinoma	null	T2N2M0
A04	M	80	Lung	Adenocarcinoma	II~III	T3N0M0
A05	F	50	Lung	Adenocarcinoma	III	T2N0M0
A06	M	70	Lung	Bronchioloalveolar carcinoma	II	T2N1M0
A07	F	66	Lung	Papillary adenocarcinoma	null	T2N0M0
A08	M	55	Lung	Adenocarcinoma	null	T2N0M0
B01	F	47	Lung	Adenocarcinoma	I~II	T2N0M0
B02	M	59	Lung	Adenocarcinoma	II	T2N0M0
B03	M	65	Lung	Small cell carcinoma	null	T2N2M0
B04	M	80	Lung	Adenocarcinoma	II~III	T3N0M0
B05	F	50	Lung	Adenocarcinoma	III	T2N0M0
B06	M	70	Lung	Bronchioloalveolar carcinoma	II	T2N1M0
B07	F	66	Lung	Papillary adenocarcinoma	null	T2N0M0
B08	M	55	Lung	Adenocarcinoma	null	T2N0M0
C01	F	47	Lung	Uninvolved lung tissue of A1, B1	null	null
C02	M	59	Lung	Uninvolved lung tissue of A2, B2	null	null
C03	M	65	Lung	Uninvolved lung tissue of A3, B3	null	null
C04	M	80	Lung	Uninvolved lung tissue of A4, B4	null	null
C05	F	50	Lung	Uninvolved lung tissue of A5, B5	null	null
C06	M	70	Lung	Uninvolved lung tissue of A6, B6	null	null
C07	F	66	Lung	Uninvolved lung tissue of A7, B7	null	null
C08	M	55	Lung	Uninvolved lung tissue of A8, B8	null	null
D01	M	51	Lung	Squamous cell carcinoma	I	T2N1M0
D02	M	60	Lung	Squamous cell carcinoma	I~II	T2N1M0
D03	M	53	Lung	Squamous cell carcinoma	III	T2N0M0
D04	M	48	Lung	Squamous cell carcinoma	III	T2N0M0
D05	M	67	Lung	Squamous cell carcinoma	III	T2N0M0
D06	M	69	Lung	Squamous cell carcinoma	III	T2N0M0
D07	M	69	Lung	Small cell carcinoma	null	T2N0M0
D08	M	60	Lung	Small cell carcinoma	null	T2N1M0
E01	M	51	Lung	Squamous cell carcinoma	I	T2N1M0
E02	M	60	Lung	Squamous cell carcinoma	I~II	T2N1M0
E03	M	53	Lung	Squamous cell carcinoma	III	T2N0M0
E04	M	48	Lung	Squamous cell carcinoma	III	T2N0M0
E05	M	67	Lung	Squamous cell carcinoma	III	T2N0M0
E06	M	69	Lung	Squamous cell carcinoma	III	T2N0M0



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E07	M	69	Lung	Small cell carcinoma	null	T2N0M0
E08	M	60	Lung	Small cell carcinoma	null	T2N1M0
F01	M	51	Lung	Uninvolved lung tissue of D1, E1	null	null
F02	M	60	Lung	Uninvolved lung tissue of D2, E2	null	null
F03	M	53	Lung	Uninvolved lung tissue of D3, E3	null	null
F04	M	48	Lung	Uninvolved lung tissue of D4, E4	null	null
F05	M	67	Lung	Uninvolved lung tissue of D5, E5	null	null
F06	M	69	Lung	Uninvolved lung tissue of D6, E6	null	null
F07	M	69	Lung	Uninvolved lung tissue of D7, E7	null	null
F08	M	60	Lung	Uninvolved lung tissue of D8, E8	null	null

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: 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).