
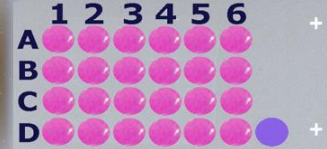


Cat No: UNC241 – Universal IHC/ISH control tissue array

Lot#	Cores	Size	Cut	Format	QA/QC		
UNC24101	24	1.5mm	4um	4X6	H&E, IHC anti-Vimentin/Cytokeratin		

Recommended applications: For Research use only. Designed for universal IHC/ISH control & antibody screening.

Description: Covers >90% of the markers currently used in pathology diagnostics, designed for universal IHC/ISH control & antibody/probe screening and optimization.

Those highlighted by "*" were from autopsy. 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	9	Tonsil	Tonsillitis	null	null
A02	M	63	Intestine, colon	Normal	null	null
A03	F	19	Thyroid	Normal	null	null
A04	M	55	Prostate	Normal, hyperplasia	null	null
A05	F	50	Breast	Invasive ductal carcinoma	II	T3N1M0
A06	M	63	Thymus	Thymoma	null	null
B01	M	9	Tonsil	Tonsillitis	null	null
B02	M	63	Intestine, colon	Normal	null	null
B03	F	19	Thyroid	Normal	null	null
B04	M	55	Prostate	Normal, hyperplasia	null	null
B05	F	50	Breast	Invasive ductal carcinoma	II	T3N1M0
B06	M	63	Thymus	Thymoma	null	null
C01	M	46	Brain, cerebral cortex	Normal*	null	null
C02	F	60	Lung	Normal	null	null
C03	M	29	Liver	Viral hepatitis related cirrhosis	null	null
C04	F	38	Uterus, myometrium	Normal	null	null
C05	F	23	Placenta	Normal	null	null
C06	F	77	Skin, foot	Melanoma	null	null
D01	M	46	Brain, cerebral cortex	Normal*	null	null
D02	F	60	Lung	Normal	null	null
D03	M	29	Liver	Viral hepatitis related cirrhosis	null	null
D04	F	38	Uterus, myometrium	Normal	null	null
D05	F	23	Placenta	Normal	null	null
D06	F	77	Skin, foot	Melanoma	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: Langxing Pan, M.D., Ph.D.



Advancing Biomedical Science Through Tissue Arrays

Immunoreactivities of UNC241

Markers	Positive tissue/cells in UNC241
AACT	Tonsil, colon
Actin, smooth muscle	Myometrium; muscularis of colon
AE-1	Colon
AE-3	Prostate
Albumin	Liver
Androgen receptor	Prostate
Bax	Breast cancer
Bcl-2	Tonsil lymphoid tissue
Bcl-6	Tonsil germinal centers
Bcl-10	Tonsil
BerEP4	Colonic epithelium; thyroid follicular epithelium
Beta catenin	Bile ducts in the liver
Calretinin	Neurons and nerves in colon; mesothelial lining over liver or lung, if available
Carcinoembryonic antigen	Colonic mucosa
CD1a	Thymoma (lymphoid cells)
CD3	Tonsil lymphoid tissue
CD4	Tonsil lymphoid tissue
CD5	Tonsil lymphoid tissue
CD8	Tonsil lymphoid tissue
CD10	Tonsil germinal centers
CD13	Brain
CD15	Histiocytes and neutrophils in tissues, eg, colon, lung, tonsil lymphoid tissue
CD20	Tonsil lymphoid tissue
CD21	Tonsil germinal centers
CD23	Tonsil germinal centers
CD25	Tonsil lymphoid tissue
CD30	Isolated lymphoid cells around germinal centers in tonsil
CD31	Blood vessels in various tissues
CD34	Blood vessels in various tissues
CD35	Tonsil germinal centers
CD43	Tonsil lymphoid tissue
CD45RO	Tonsil lymphoid tissue
CD45RB, leukocyte common antigen	Tonsil lymphoid tissue
CD54	Liver, lung
CD56	Brain tissue
CD57 (Leu7)	Isolated cells in germinal centers in tonsil; prostatic acini
CD68	Histiocytes in tissues, e.g., colon, lung
CD79a	Tonsil lymphoid tissue
CD99a (MIC2)	Thymoma (lymphoid cells)
CD117 (c-kit)	Brain, lung, tonsil and mast cells in many other tissues
Cdc2	Breast cancer
Cdk2	Colon
c-erbB2	Breast cancer
Choriogonadotropin	Placenta



Advancing Biomedical Science Through Tissue Arrays

Chromogranin-A	Isolated endocrine cells in crypts of colonic mucosa
Collagen I	Placenta
Collagen IV	Placenta, tonsil
Cox2	Colon
CX3CR1	Tonsil
Cyclin D1	Suprabasal cells in stratified squamous epithelium of tonsil
CYP1B1	Liver
Cytokeratin 7	Various epithelial structures, except colon
Cytokeratin 20	Colonic epithelium
Cytokeratin - high molecular weight	Stratified squamous epithelium of tonsil; basal cells of prostate
Cytokeratin - low molecular weight	Any of the epithelial structures, except the stratified squamous epithelium of tonsil
Cytokeratin-Pan	Any of the epithelial structures, e.g., breast cancer, lung, thymoma, colon, prostate, thyroid
Desmin	Myometrium; muscularis of colon
E-GFR	Placenta
Epithelial membrane antigen (EMA)	Some of the epithelial structures
Estrogen receptor	Myometrium, breast carcinoma (++~+++)
Factor VIII-related antigen	Blood vessels in various tissues
GAPDH (V-18)	Liver, lung
GCDFP-15(BRST-2)	Breast cancer
Glial fibrillary acidic protein	Brain tissue
HBcAg	Hepatocytes (Cirrhosis associated with hepatitis B)
HBsAg	Hepatocytes (Cirrhosis associated with hepatitis B)
hCG	Placenta
HDJ2	Tonsil
Heme-oxygenase-1 (HO-1)	Lung
HEP-PAR 1	Hepatocytes
HER2	Breast carcinoma (++)
HGF	Liver
Histone H2AX	Tonsil
Histone H3	Tonsil
HPL	Placenta, tonsil
HSA (hepatocyte specific antigen)	Liver
HMB-45	Melanoma
IgA	Tonsil lymphoid tissue
IgD	Tonsil lymphoid tissue
IgE	Tonsil lymphoid tissue
IgG	Tonsil lymphoid tissue
IgM	Tonsil lymphoid tissue
Ig Kappa light chain	Tonsil lymphoid tissue
Ig lambda light chain	Tonsil lymphoid tissue
IL-1	Lung
IL-6	Lung
IL-8	Lung
Ki67	Many different tissues, eg, lymphoid tissue in tonsil
KP-1	Colon, liver
Leukocyte common antigen (CD45RB)	Tonsil lymphoid tissue



Advancing Biomedical Science Through Tissue Arrays

MAC	Placenta
MAP2	Brain
Melan-A	Melanoma
MMP-2	Placenta
MMP-9	Lung
MT-1	Tonsil
MT-2	Tonsil
Myeloperoxidase	Neutrophils within the blood vessels of various tissues
Nestin	Brain
NeuN	Brain
Neurofilament	Brain tissue
Neutrophil esterase	Tonsil
Nitrotyrosine	Placenta
NOS2	Liver
NOS3	Brain
NSE (neuron specific enolase)	Brain
Occludin	Lung
P53	Thymoma (isolated cells with weak staining); tonsil lymphoid tissue (isolated cells with weak staining)
P63	Breast cancer, colon
Paxillin	Placenta
PCNA	Tonsil
PLAP	Placenta, tonsil
Progesterone receptor	Myometrium
Prostatic specific antigen	Prostate
S100 protein	Brain tissue, melanoma
SCF (stem cell factor)	Brain
Serotonin	lung
Somatostatin	Brain
Somatostatin receptors	Brain
Sos-1	Placenta
Surfactant	Lung (pneumocytes)
Synaptophysin	Brain tissue; isolated endocrine cells in crypts of colonic mucosa
TCR, beta	Thymoma, tonsil, appendix
TGF-beta RI	Prostate
TGF-beta1 LC	Placenta
TdT	Thymoma (lymphoid cells)
Thyroglobulin	Thyroid
Thyroid transcription factor-1 (TTF-1)	Lung (pneumocytes); thyroid
TNF, alpha	Lung
ULEX	Prostate, tonsil
VCAM-1	Vessels in Tissue
Vimentin	Colon, Prostate, Tonsil,
vWF (von Willebrand Factor)	Tonsil