

# Comprehensive Tissue Biomarker Services Menu

---

**Immunohistochemistry  
(IHC)**

**Multiplex  
Brightfield (mBF)**

**Multiplex  
Immunofluorescence (mIF)**

**Polymerase Chain  
Reaction (qPCR)**

***In Situ*  
Hybridization (ISH)**

## **EXPERTISE**

Decades of experience developing, validating and applying biomarker assays

## **TECHNOLOGY**

Unbiased selection of the most suitable platforms

## **COMPLIANCE & QUALITY**

CLIA-certified, CAP-Accredited service laboratories with Health Institute status in Europe

## **GLOBAL HARMONIZATION**

Globally harmonized LIMS, 21 CFR Part 11 and HIPAA-compliant

## **ACCESS TO CLINICAL SAMPLES**

Access to the world's largest commercial biorepository

## **RAPID ORTHOGONAL TESTING**

Clinical flow, cell biology, genomic, and proteomic services – all under one roof

**Use the Power of Discovery<sup>TM</sup>**

to unlock the full potential of biomarker analysis for clinical trials, companion diagnostic development, and beyond.

Singleplex IHC assays are powerful tools for studying the expression and localization of specific biomarkers within tissues. They contribute to our understanding of cellular processes, disease characterization, companion diagnostics, and biomarker validation for clinical trial applications.

## Immunohistochemistry Assays - Singleplex

OCT4	CCR2	CD183	<b>ER</b>	HMB45	LSD1	p-Caveolin	SDMA
5T4	CCR4	CD200	ER alpha	HMB-45	MAD2	p-CDC	Serca1
A2AR	CCR8	CD200R1	ER beta	HMFG-2	MAGE-A10	pChk1-S296	Serca2
ACTH	CD1a	CD209	<b>ERK</b>	hnRNP-A1	Mammaglobin	pChk1-S317	Serpin-H1
Actin	CD2	CD272	Estradiol 17B	HO1	Mast Cell Tryptase	pChk1-S345	SHH
ADMA-R225	<b>CD3</b>	CD278	Factor XIIIa	HPK1	<b>mATRC101 (N297A)</b>	PCNA	Siglec-15
AFP	CD4	CDC2	FAK	HPP14	MCL-1	PD1	SLFN11
AIB-1	CD5	CDC7	FAM50A	HPV- L1	MCM2	PDE3A	SLPI
<b>AKT</b>	CD7	<b>CDH17</b>	FAM50B	HRAS	MCP-1	PDFGR	SMAD4
<b>ALK</b>	<b>CD8</b>	CDX-2	FAP	<b>HSV I/II</b>	MCP-5	PDGFR-D	SMARCA2
Alpha-1-antitrypsin	CD10	<b>CEA</b>	FAPa	HVEM	MCT	PDGFR-Beta	SMARCA4
Alpha-synuclein	CD11b	<b>CEACAM5</b>	Fas	Iba-1	MCT/CD63	<b>PD-L1 (28-8)</b>	SORT1
AMACR	CD11c	CEACAM6	Fascin	ICOS-Ligand (ICOSL)	MCT1	<b>PD-L1 (22C3)</b>	Sortilin
AR	CD117 (cKIT)	Cerb-B2	FGF-1	IDO	MCT4	<b>PD-L1 (SP263)</b>	SOX10
ASGR1	CD14	Chk1	FGF-2	IgA	MDM2	<b>PD-L1 (SP142)</b>	SPAP1
<b>ATM</b>	CD15	ChromograninA(CHGA)	FGF-Basic	IGF1R	Melan A	p-EGFr	SPARC
AVP	CD16	CK5/6	FGFR3	IGFBP-2	MetAP1	Perforin	SSTR2
<b>AXL</b>	CD19	CK7	Fibronectin-EDB	IgG	MG85	Peripherin	SSTR5
B72.3	<b>CD20</b>	CK8/18	FLIP	IGM	MHC Class I	p-ERK	STAT3
<b>B7-H4</b>	CD21	CK10/13	FLRT3	IgM	MICA/MICB	p-FAK	Sting
B7H6	<b>CD23</b>	CK14	Folate Receptor Alpha	IL-11	<b>MLH1</b>	PGP9.5	<b>Stn</b>
B854	<b>CD25</b>	CK16	FOXP3	IL-11R	MPO	p-HER2	<b>Survivin</b>
b-amyloid	CD27	CK19	FR	IL-13	<b>MSH2</b>	p-HER3	SV40
Bax	CD30	CK20	FVIII	IL18BP	<b>MSH6</b>	pHH3	Synaptophysin (SYP)
BCL-2	<b>CD31</b>	CLA	FXYD3	IL18Ra	MSLN	p-IGF1R/pIR	Tau
<b>BCL-6</b>	CD32A	Claudin-1	Galectin-1	IL1R8/SIGIRR	MUC1	p-MAPK	T-bet
Ber-EP4	CD32B	Claudin-6	Galectin-3	IL-21R	MUC2	p-MCM2	TCN1
<b>Beta-catenin</b>	CD33	<b>Claudin-18</b>	Galectin-9	IL-6	MUC5A	p-MCM2-S40	TDP-43
Beta-hCG	CD34	<b>C-MET</b>	gammaH2AX	IL-6Ra	MUC6	p-MCM2-S53	TDT
BIM-1	CD35	CMV	GAP-43	IL-8	MUM1	p-MEK1/2	TEM8
Borealin	CD37	Collagen Type IV	GAS6	ILT3	Myeloperoxidase	<b>PMS2</b>	TF
BRAF	CD39	COX2	GATA-3	ILT4	Myogenin	PNA	Thyreblobulin
BRAF V600E	CD40	cPARP	GCDFP15	INCENP	Napsin	Podocalyxin	<b>TIGIT</b>
BRCA1	CD40L	CSF1R	<b>GCET1</b>	INFG	N-cadherin	p-p50	TIM-3
BRCA2	CD43	CXCR1	GDF-15	Inhibin	Neurofilament	p-p65	TL1A
BRD4	CD45	CXCR2	GFAP	Insulin	Neuropilin 1	PPARG	TLR3
BrdU	CD45RO	CXCR4	gH2AX	Insulin GF-r	NF	<b>PR</b>	TMEFF2
BTK	CD47	Cyclin D1	GLI-1	Insulin GF-r alpha	NFKB2	pRb	TRK A
C1q	CD51	CYP1B1	GLUT1	InsulinGrowth Factor 1	Nitrotyrosine	PRGN	Tryptase
C3c	CD54	CytokeratinAE1/AE3	Glycophorin A	InsulinGrowth Factor 1R	NKG2D	p-RIPK2	TSH
C4d	CD56	D2-40	Glypican 3	Insulin Growth Factor 2	NLRP3	PROS1	TTF-1
C8FW	CD57	DcR3	GP130	Insulin Receptor A	nM23	pS2	Tunel
CA 19-9	<b>CD58</b>	DDL3	<b>GPC3</b>	IRAK4	NOTCH1	PSA	Tyrosinase
CA125	CD61	Desmin	GPCR41	ISMOR	NOTCH3	PSMA	Ub-PCNA
Cadherin 17	CD63	DGKa	GPMOR	JAG1	NOTCH4	p-STAT3	UCK2
Cadherin 23	CD66a	DGKz	GNMB	JAM-C	NRF2	pSTAT5 (Y694)	Uroplakin II
Cadherin E	<b>CD68</b>	DLL4	<b>GR</b>	JSB-1	NSE	pSYK	Urotensin II
CA-IX	CD70	DNA-PKS	Granzyme B	Kappa	Numb	p-Tau	VEGF
Calcitonin	CD71	DOG1	Helicobacter pylori	Kappa Light Chain	<b>Ny-Eso-1</b>	<b>PTEN</b>	VEGF-A
Calgranulin B	CD73	E2F1	HENT1	Keratin	p130 CAS	p-Tyrosine	VEGFR1
Calretinin	CD74	EB1	<b>HER2</b>	Keratin 8	p14 ARF	PVR	VEGFR2
CAR	CD75	EBV	HER3	Keratin 18	P16	R9	Vimentin
Caspase 3	CD79A	E-cadherin	HER4	KI67	P21	RAD51	Vista
Caspase 8	CD83	ED1	HES-1	Ki67;CD8	p27	RB1	WWF(vonWillebrandfactor)
Caspase 9	CD95	EGFR	HHV8	KRAS	P40	<b>RCC</b>	Wee1
Catenin gamma	CD95L	EGLN1	HIF2a	Kremen-2	<b>P53</b>	RIP3K	WT1
Cathepsin C	CD99	EMA	HIF-2a	<b>LAIR-1</b>	P63	RIPK2	YAP-1
Cathepsin D	CD123	Emmprin	Histone H3	Lambda	p68	<b>ROR1</b>	
Cathepsin S	CD137	EP4	HLA-ABC	Lamda Light Chain	p-AKT	<b>ROR2</b>	
Caveolin 1	CD138	EPCAM	HLA-D	LDHA	PALP	RORyT	
CCL17	CD141	EphA5 Receptor	HLA-DR	LILRB2	Pan-cytokeratin	ROS1	
CCL2	CD161	EphrinA2	HLA-G	LOX5	PAP	S100	
CCL27	CD163	EphrinA3	HM74a	LRRC15	PARP1	S100p	

IVD/CE assay available | LDT assay available | Both IVD/CE and LDT assays available

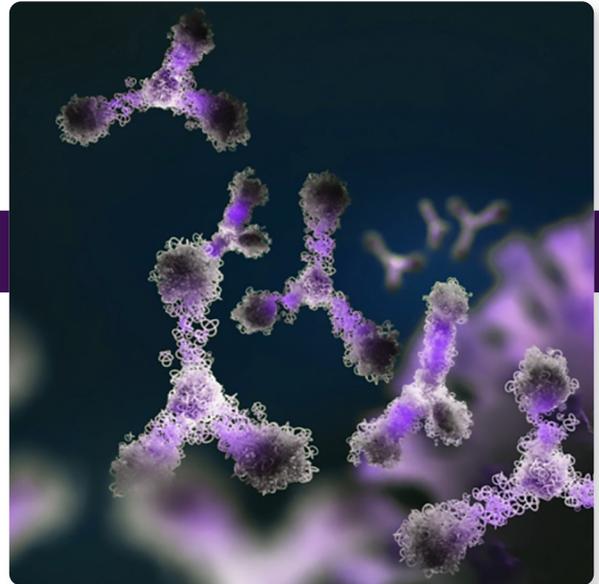
info@dls.com | (866) 838-2798 | +359 2 870-2117 | www.dls.com

Multiplex IHC assays maximize the data acquired from individual samples through simultaneous detection and visualization of multiple biomarkers. This facilitates multiparametric analysis offering a more detailed understanding within a spatial and functional context for multiple targets.

## Immunohistochemistry Assays – Bright Field Multiplex

<b>CD10/MUM1</b>	CD4/FOXP3	OX40/CD137	PD-L1/CD68
CD137/CD64/CD32	CD8/CD4/FOXP3	OX40/CTLA4	PD-L1/PD1
CD163/CD68	CD8/panCK	p21/CD34	Perforin/CD3
CD31/B7H3/CD276	FAP/panCK	PD-L1/CD137	VISTA/CD8
CD34/CD117	Ki67/CD8		

Multiplex IHC assays maximize the data acquired from individual samples through simultaneous detection and visualization of multiple biomarkers. This facilitates multiparametric analysis offering a more detailed understanding within a spatial and functional context for multiple targets.



## Multiplex Immunofluorescence Assays

CD11b/CD14/CD15/HLA-DR  
 CD11c/CD20/CD68/MHCII  
 CD3/CD15/CD335/GranzymeB/panCK/CD68/CD163  
 CD3/Granzyme B/Ki-67/CK/SOX10  
 CD4/CD8/FOXP3/CK/SOX10  
 CD4/CD8/PD-L1/FOXP3/b-Catenin/panCK  
 CD8/CD68/PD-L1/SK/SOX10

Akoya 6-Plex Staining

nCounter technology generates high-throughput, multiplexed, quantitative gene expression data. With its ability to analyze hundreds of targets simultaneously, it has broad applications for basic research, translational medicine, biomarker discovery, and clinical diagnostics.

qPCR is a high-throughput quantitative technique for detecting changes in gene expression. Its sensitivity enables the detection of low-abundance targets, useful for biomarker analysis, disease monitoring, and genetic profiling.

ISH allows for precise spatial localization of target DNA or RNA sequences within cells or regions of tissues through hybridization with nucleic acid probes. It is widely used to study gene expression in research and clinical applications.

### NanoString nCounter Analysis

Any Biomarker

### qPCR

**BRAF**

**EGFR**

**FGFR**

**HPV**

**KRAS**

**PIK3CA**

VCN

VSVg

### In Situ Hybridization

DNA	RNA
ALK	<b>AXL</b>
BCL2	<b>EBV</b>
BCL6	<b>FGFR1</b>
CDK8	<b>FGFR1/FGFR2/FGFR3</b>
<b>C-MET</b>	<b>FGFR2</b>
cMYC	<b>FGFR3</b>
EGFR	<b>FGFR4</b>
<b>FGFR</b>	<b>HPV</b>
<b>HER2</b>	<b>LGR-5</b>
<b>KRAS</b>	NRG1
MYC	NTSR1
ROS1	SLFN12
TOP2A	<b>SLFN12/PDE3A</b>

IVD/CE assay available | LDT assay available | Both IVD/CE and LDT assays available

info@dls.com | (866) 838-2798 | +359 2 870-2117 | www.dls.com



# DISCOVERY

L I F E S C I E N C E S™

Science at your Service™

Contact us to learn more about how our comprehensive molecular pathology services can help propel your research projects

[info@dls.com](mailto:info@dls.com) | (866) 838-2798 | +359 2 870-2117 | [www.dls.com](http://www.dls.com)