

**Antibodies Optimized
by the HTR on the Ventana Discovery System**

Antibody	Clone	Vendor	Cat No	Species	Control
ADPR/Perilipin 2		Proteintech	15294-1-AP	Rabbit (poly)	liver, liver CA, Colon CA, RCC
phospho-Akt	Ser473 D9E	Cell Signaling Technology	4060	Rabbit (mono)	endometrium, lung carcinoma
Alpha Smooth Muscle Actin	SP171	abcam	ab150301	Rabbit (mono)	appendix, colon
Arginase (Liver Arginase)	EPR6672 (B)	abcam	ab133543	Rabbit (mono)	appendicitis, hepatocellular carcinoma
ATP6V1B1		abcam	ab110752	Rb (poly)	placenta*, stomach (?), breast CA
BIP	C50B12	Cell Signaling Technology	3177	Rabbit (mono)	prostate carcinoma*, colon carcinoma, glioblastoma
Caspase-3		Cell Signaling Technology	9662	Rb (poly)	norm colon, tonsil
CD3	RBT-CD3	Bio SB (Cancer Diagnostics)	BSB 6425	Rabbit (mono)	tonsil*, LN, colon, spleen, etc.
CD4	SP35	Cell Marque	104R-14	Rabbit (mono)	tonsil, LN
CD4	RBT-CD4	Bio SB (Cancer Diagnostics)	BSB5151	Rabbit (mono)	tonsil, LN
CD8	SP57	Ventana	790-4460	Rabbit (mono)	tonsil*, T-cell lymphoma
CD10		abcam	ab82073	Rb (poly)	tonsil*, small intestine
CD31	JC70A	Dako	M0823	Ms (mono)	tonsil*, spleen, kidney, LN
CD31		abcam	ab182981	Rabbit (mono)	Kidney, lung, tonsil
CD34	QBEnd10	Dako	M7165	Ms (mono)	tonsil
CD45 LCA	RP2/18	Ventana	760-2505	Ms (mono)	tonsil
CD68	PG-M1	Dako	M0876	Ms (mono)	tonsil, brain
CD68	PG-M1	Dako	GA613	Ms (mono)	tonsil, kidney, liver
CD69	FN50	Invitrogen	14-0699-82	Ms (mono)	Hanta virus-infected tissues
CD105	Endoglin SN6h	Dako	M3527	Ms (mono)	tonsil
Cdc42		Atlas	HPA069590	Rabbit (poly)	tonsil, LN, spleen, colon CA
CDX-2	EPR2764Y	abcam	ab76541	Rabbit (mono)	norm colon*, gastric adenocarcinoma
COX-1		abcam	ab244261	Rabbit (poly)	skin, kidney, tonsil, colorectal CA
COX-2	CX-294	Dako	M3617	Ms (mono)	colorectal adenoca*, H/N SQCC, pancreatic CA
COX-2	D5H5	Cell Signaling Technology	12282	Rabbit (mono)	colorectal adenoca, ovarian CA, kidney
CrkL		abcam	ab151791	Rb (poly)	Stomach carcinoma
CSF3R (Colony Stimulating Factor)		Atlas	HPA048086	Rb (poly)	placenta
Cytokeratin 5	EP1601Y	abcam	ab52635	Rabbit (mono)	tonsil, cervical CA, SqCCa, TCC bladder
Cytokeratin 10	EP1607IHCY	abcam	ab76318	Rabbit (mono)	skin, tonsil
Cytokeratin AE1/AE3	AE1/AE3	Dako	GA053	Mouse (mono)	liver, skin, tonsil
D2-40 (Podoplanin)	D2-40	Dako	M3619	Ms (mono)	tonsil
EGFR	D38B1	Cell Signaling Technology	4267	Rabbit (mono)	placenta*, lung CA
phospho-EGFR	Tyr1068	Cell Signaling Technology	2234	Rb (poly)	breast carcinoma (TB3611 TA)
ERG	EP111	Cell Marque	434R-14	Rabbit (mono)	tonsil*, spleen
Fibrinogen	5C5	Thermo Scientific	LF-MA0108	Ms (mono)	lung (hanta)
GATA3	L50-823	Cell marque (Ventana)	390M-10 (760-	Ms (mono)	breast CA*, urothelial CA
G-CSF		abcam	ab9691	Rb (poly)	placenta
GFAP		abcam	ab7260	Rb (poly)	norm brain
Giantin		abcam	ab93281	Rb (poly)	liver
Gli1		abcam	ab92611	Rb (poly)	testis, myometrium, fallopian tube, brain (cerebellum)
Hes1		abcam	ab71559	Rb (poly)	thyroid? Sm intestine?
p-HSP27	Ser82 (D1H2F6)	Cell Signaling Technology	9709	Rb (mono)	breast/prostate carcinoma
Iba1		abcam	ab153696	Rb (poly)	brain, spleen
Ki-67	MIB-1	Dako	M7240	Ms (mono)	tonsil, intestinal mucosa
LAMP2		Proteintech	66301-1-Ig	Ms (mono)	liver, liver CA, lung CA, kidney
LAMTOR4	D4P60	Cell Signaling Technology	13140	Rabbit (mono)	Kidney, Lung CA (SCCA), Prostate CA, LN
Mammaglobin	304-1A5	Dako	M3625	Ms (mono)	breast CA, normal skin
p-MAPKAPK-2 (p-MK2)	Thr334	Cell Signaling Technology	3041	Rb (poly)	breast CA, colon (?)
phospho p44/42 MAPK (Erk 1/2)	Thr202/Tyr 204	Cell Signaling Technology	4376	Rabbit (mono)	colon CA, prostate CA
Mitochondria	113-1	Millipore Sigma	MAB 1273	Ms (mono)	kidney, liver, tonsil
MMP1	EP1247Y	abcam	ab52631	Rabbit (mono)	cervical CA, testis
MMP1		Bioss	bs-0463R	Rabbit (poly)	testis, cervical CA
MMP10		abcam	ab38930	Rb (poly)	placenta, kidney
MSI2	EP1305Y	abcam	ab76148	Rabbit (mono)	placenta*, brain
Myeloperoxidase	EPR20257	abcam	ab208670	Rabbit (mono)	spleen, stomach CA
Neutrophil Elastase		abcam	ab68672	Rb (poly)	spleen*, bone marrow
NKp46 (CD335)	CD335	ThermoFisher Sci	PA5-79720	Rb (poly)	tonsil
Notch1		abcam	ab8925	Rb (poly)	colorectal CA

p16 (CINtec®)	E6H4	Ventana	705-4713	Ms (mono)	p16+ tonsil or cervix (TB2107 TA)
p16-INK4a	INK4a	BD Pharmingen	15-1325GR	Ms (mono)	p16+ tonsil or cervix (TB2107 TA)
P2Y2	H-70	Santa Cruz	sc-20124	Rb (poly)	spleen*, testis
PAX8		Proteintech	10336-1-AP	Rb (poly)	ovary tumor, thyroid cancer, kidney, RCC, testis
PROX1	EPR19273	abcam	ab199359	Rabbit (mono)	lymph node, tonsil
PTEN XP	D4.3	Cell Signaling Technology	9188	Rabbit (mono)	normal colon
phospho-S6 Ribosomal Protein	Ser240/244	Cell Signaling Technology	2215	Rb (poly)	Breast CA
Rac1		Atlas	HPA047820	rabbit (poly)	breast, prostate, tonsil, skin
SATB2	EP281	Cell Marque	384R	Rabbit (mono)	Colon adenocarcinoma
Smad3	EP568Y	abcam	ab40854	Rabbit (mono)	Stomach carcinoma
SNV		(researcher provided)		Rb (poly)	Hanta + lung
TAP1		abcam	ab83817	Rb (poly)	spleen
TTF-1 (Thyroid Transcription Factor)	SPT24	Novocastra/Leica	NCL-L-TTF-1	Ms (mono)	thyroid
Thyroglobulin	DAK-Tg6	Dako	M0781	Ms (mono)	thyroid
TGF β Receptor I		abcam	ab31013	Rb (poly)	placenta
Tyrosine Hydroxylase	LNC1	Millipore	MAB318	Ms (mono)	adrenal (+); liver (-)
UCP1		abcam	ab23841	Rb (poly)	brown adipose
uPA		(researcher obtained)		Rb (mono)	lung (hanta)
uPAR		American Diagnostica	3936	Ms (mono)	lung (hanta)
VATPase C1	C1 (H300)	Santa Cruz	sc-20944	Rb (poly)	stomach, placenta
VEGF	EP1176Y	abcam	ab52917	Rabbit (mono)	placenta, tonsil
VEGF Receptor 2	55B11	Cell Signaling Technology	2479	Rabbit (mono)	placenta
VEGF Receptor 2	D5B1	Cell Signaling Technology	9698	Rabbit (mono)	placenta