

TABLE 2: Paulovich Lab Monoclonal antibodies currently in development.

Gene Symbol (HGNC, genenames.org)	Alternate Gene Symbols	Target Protein Name	UniProt ID (& link)	Peptide Modification detected	Modification site	Assay Species	Notes	Mouse or rabbit mAb
ACADSB		acyl-CoA dehydrogenase short/branched chain	<a href="#">P45954</a>	Non-modified		Human		Rabbit
ACADSB		acyl-CoA dehydrogenase short/branched chain	<a href="#">P45954</a>	Non-modified		Human		Mouse
ACOT7		acyl-CoA thioesterase 7	<a href="#">O00154</a>	Non-modified		Human		Rabbit
ACOT7		acyl-CoA thioesterase 7	<a href="#">O00154</a>	Non-modified		Human		Mouse
AIFM1		apoptosis inducing factor mitochondria associated 1	<a href="#">O95831</a>	Non-modified		Human		Rabbit
AIFM1		apoptosis inducing factor mitochondria associated 1	<a href="#">O95831</a>	Non-modified		Human		Mouse
ATM		Serine-protein kinase ATM	<a href="#">Q13315</a>	Phosphorylation	S1981	Human		Mouse
BARD1		BRCA1 associated RING domain 1	<a href="#">Q99728</a>	Non-modified		Human		Mouse
BCL2	Bcl-2, PPP1R50	B-cell CLL/lymphoma 2	<a href="#">P10415</a>	Non-modified		Human		Mouse
BCL2L1	BCLX, BCL2L, Bcl-X, bcl-xL, bcl-xS, PPP1R52	BCL2 Like 1;Protein Phosphatase 1, Regulatory Subunit 52	<a href="#">Q07817</a>	Non-modified		Human		Mouse
BRCA1	RNF53, BRCC1, PPP1R53, FANCS	Breast cancer type 1 susceptibility protein	<a href="#">P38398</a>	Non-modified		Human		Rabbit
BRCA2	FAD, FAD1, BRCC2, XRCC11	breast cancer 2, early onset	<a href="#">P51587</a>	Non-modified		Human		Mouse
BRCA2	FAD, FAD1, BRCC2, XRCC11	breast cancer 2, early onset	<a href="#">P51587</a>	Non-modified		Human		Rabbit
CASP14	ARCI12	Caspase-14	<a href="#">P31944</a>	Non-modified		Human		Mouse
CASP7		caspase 7	<a href="#">P55210</a>	Non-modified		Human		Rabbit
CASP7		caspase 7	<a href="#">P55210</a>	Non-modified		Human		Mouse
CCNB1		cyclin B1	<a href="#">P14635</a>	Non-modified		Human		Mouse
CD44	CDW44, CSPG8, ECMR-III, HCELL, HUTCH-I, IN, LHR, MC56, MDU2, MDU3, MIC4, Pgp1	CD44 antigen	<a href="#">P16070</a>	Non-modified		Human		Mouse
CD58		Lymphocyte function-associated antigen 3	<a href="#">P19256</a>	Non-modified		Human		Rabbit
CD86	B7.2, B7-2	CD86 molecule	<a href="#">Q6GTS4</a>	Non-modified		Human		Rabbit
CD99		CD99 antigen	<a href="#">P14209</a>	Non-modified		Human		Rabbit
CDK12	CRK7, CRKR, KIAA0904	cyclin dependent kinase 12	<a href="#">Q9NYV4</a>	Non-modified		Human		Rabbit
CDKN1A	P21, CIP1, WAF1, SDI1, CAP20, p21CIP1, p21Cip1/Waf1, p21	cyclin-dependent kinase inhibitor 1A (p21, Cip1)	<a href="#">P38936</a>	Non-modified		Human		Rabbit
CGAS		Cyclic GMP-AMP synthase	<a href="#">Q8N884</a>	Non-modified		Human		Rabbit
COX6A1		cytochrome c oxidase subunit 6A1	<a href="#">P12074</a>	Non-modified		Human		Rabbit
COX6A1		cytochrome c oxidase subunit 6A1	<a href="#">P12074</a>	Non-modified		Human		Mouse
CSF1R	C-FMS, CSFR, CD115	colony stimulating factor 1 receptor	<a href="#">P07333</a>	Non-modified		Human		Rabbit
CXCL12	IRH, PBSF, SCYB12, SDF1, TLSF, TPAR1	Stromal cell-derived factor 1	<a href="#">P48061</a>	Non-modified		Human		Mouse
DDX11	CHLR1, KRG2, CHL1, ChIR1, WABS	DEAD/H-box helicase 11	<a href="#">Q96FC9</a>	Non-modified		Human		Rabbit
DYNLL1	hdlc1, DLC1, PIN, LC8, DLC8	Dynein light chain 1, cytoplasmic	<a href="#">P63167</a>	Non-modified		Human		Rabbit
EPCAM		epithelial cell adhesion molecule	<a href="#">P16422</a>	Non-modified		Human		Mouse
ERBB4	HER4	Receptor tyrosine-protein kinase erbB-4	<a href="#">Q15303</a>	Non-modified		Human		Mouse
ERCC3		General transcription and DNA repair factor IIIH helicase subunit XPB	<a href="#">P19447</a>	Non-modified		Human		Rabbit
FADD	GIG3, MORT1	FAS-associated death domain protein	<a href="#">Q13158</a>	Non-modified		Human		Mouse
FANCC	FAC, FA3	Fanconi anemia, complementation group C	<a href="#">Q00597</a>	Non-modified		Human		Mouse
FANCI	FLJ10719	Fanconi anemia, complementation group I	<a href="#">Q9NV11</a>	Non-modified		Human		Mouse
FASN		Fatty acid synthase	<a href="#">P49327</a>	Non-modified		Human		Mouse
FDX1		ferredoxin 1	<a href="#">P10109</a>	Non-modified		Human		Rabbit
FDX1		ferredoxin 1	<a href="#">P10109</a>	Non-modified		Human		Mouse
FH		Fumarate hydratase, mitochondrial	<a href="#">P07954</a>	Non-modified		Human		Rabbit
FOLR1		Folate receptor alpha	<a href="#">P15328</a>	Non-modified		Human		Mouse
HDAC1		Histone deacetylase 1	<a href="#">Q13547</a>	Non-modified		Human		Mouse
HLA-F		major histocompatibility complex, class I, F	<a href="#">P30511</a>	Non-modified		Human		Rabbit
HMGB1	HMG-1, HMG1, HMG3, SBP-1	high mobility group box 1	<a href="#">P09429</a>	Phosphorylation	pS35	Human		Mouse
HMGB1	HMG3, SBP-1, DKFZp686A04236	High mobility group protein B1	<a href="#">P09429</a>	Non-modified		Human		Rabbit
IDH1		isocitrate dehydrogenase 1 (NADP+), soluble	<a href="#">Q75874</a>	Non-modified		Human		Mouse
IDH2		isocitrate dehydrogenase 2 (NADP+), mitochondrial	<a href="#">P48735</a>	Non-modified		Human		Mouse
IDH3A		isocitrate dehydrogenase 3 (NAD+) alpha	<a href="#">P50213</a>	Non-modified		Human		Mouse
IDH3B		isocitrate dehydrogenase 3 (NAD+) beta	<a href="#">Q43837</a>	Non-modified		Human		Mouse
IDH3G		isocitrate dehydrogenase 3 (NAD+) gamma	<a href="#">P51553</a>	Non-modified		Human		Mouse
IKBKG		inhibitor of kappa light polypeptide gene enhancer in B-cells	<a href="#">Q9Y6K9</a>	Non-modified		Human		Rabbit
IL10RB		interleukin 10 receptor, beta	<a href="#">Q08334</a>	Non-modified		Human		Rabbit
IL1RAP		interleukin 1 receptor accessory protein	<a href="#">Q9NPH3</a>	Non-modified		Human		Rabbit
IL6ST		interleukin 6 signal transducer (gp130, oncostatin M receptor)	<a href="#">P40189</a>	Non-modified		Human		Rabbit
IRF3		Interferon regulatory factor 3	<a href="#">Q14653</a>	Non-modified		Human		Rabbit
ITGB5		Integrin beta-5	<a href="#">P18084</a>	Non-modified		Human		Mouse
JAK2	JTK10	Janus kinase 2	<a href="#">Q60674</a>	Non-modified		Human		Rabbit
KMT2C	HALR, KLEFS2, MLL3	Histone-lysine N-methyltransferase 2C	<a href="#">Q8NEZ4</a>	Non-modified		Human		Mouse
LAG3	CD223	lymphocyte-activation gene 3	<a href="#">P18627</a>	Non-modified		Human		Rabbit
LIPE		Hormone-sensitive lipase	<a href="#">Q05469</a>	Non-modified		Human		Mouse
MET	HGFR, RCCP2, DFNB97, C-MET, AUTS9	Hepatocyte growth factor receptor	<a href="#">P08581</a>	Non-modified		Human		Rabbit
MR1		Major histocompatibility complex class I-related gene protein	<a href="#">Q95460</a>	Non-modified		Human		Rabbit
MRE11A		Double-strand break repair protein MRE11	<a href="#">P49959</a>	Non-modified		Human		Rabbit
MSH3	DUP, MRP1	mutS homolog 3	<a href="#">P20585</a>	Non-modified		Human		Rabbit
MTDH		Protein LYRIC	<a href="#">Q86UE4</a>	Non-modified		Human		Mouse
MUC16	CA125	Ovarian Carcinoma Antigen CA125	<a href="#">Q8WXI7</a>	Non-modified		Human		Rabbit
N/A (motif ab)		anti-phospho Tyrosine motif		Phosphorylation	pY motif	Human		Rabbit
N/A (motif ab)		anti-Acetylated Lysine motif		Acetylation	Ac-K motif	Human		Rabbit

<i>N/A (motif ab)</i>		anti-Ubiquitin motif		Ubiquitination	Ub motif	Human		Rabbit
PDIA3	P58, ERp61, ERp57, ERp60, GRP57, PI-PLC, HsT17083	Protein disulfide-isomerase A3	<a href="#">P30101</a>	Non-modified		Human		Mouse
PECR		peroxisomal trans-2-enoyl-CoA reductase	<a href="#">Q9BY49</a>	Non-modified		Human		Rabbit
PECR		peroxisomal trans-2-enoyl-CoA reductase	<a href="#">Q9BY49</a>	Non-modified		Human		Mouse
PFKFB3	IPFK2, PFK2, iPFK-2	6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase	<a href="#">Q16875</a>	Non-modified		Human		Mouse
PLIN2		perilipin 2	<a href="#">Q99541</a>	Non-modified		Human		Rabbit
PLIN2		perilipin 2	<a href="#">Q99541</a>	Non-modified		Human		Mouse
POLE	POLE1	polymerase (DNA directed), epsilon	<a href="#">Q07864</a>	Non-modified		Human		Rabbit
POLE3	CHARAC17, CHRAC17, CHRAC2, YBL1, p17	DNA polymerase epsilon subunit 3	<a href="#">Q9NRF9</a>	Non-modified		Human		Mouse
POLM	Tdt-N	polymerase (DNA directed), mu	<a href="#">Q9NP87</a>	Non-modified		Human		Mouse
PRF1	PPF, P1, HPLH2	perforin 1 (pore forming protein)	<a href="#">P14222</a>	Non-modified		Human		Rabbit
PRKCD		Protein kinase C delta type	<a href="#">Q05655</a>	Non-modified		Human		Mouse
PRKDC	DNPK1, p350, DNAPK, XRCC7, DNA-PKcs, DNAPKc, DNA-PKC, p460	protein kinase, DNA-activated, catalytic polypeptide	<a href="#">P78527</a>	Non-modified		Human		Mouse
PTGES2		prostaglandin E synthase 2	<a href="#">Q9H727</a>	Non-modified		Human		Rabbit
PTGES2		prostaglandin E synthase 2	<a href="#">Q9H727</a>	Non-modified		Human		Mouse
RB1		Retinoblastoma-associated protein	<a href="#">P06400</a>	Non-modified		Human		Rabbit
RELA		v-rel reticuloendotheliosis viral oncogene homolog A (avian)	<a href="#">Q04206</a>	Non-modified		Human		Mouse
SDHB		Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial	<a href="#">P21912</a>	Non-modified		Human		Rabbit
SDHC		Succinate dehydrogenase cytochrome b560 subunit, mitochondrial	<a href="#">Q99643</a>	Non-modified		Human		Rabbit
SIRPA	SHPS1, SIRP, MYD-1, BIT, P84, SHPS-1, SIRPalpha, CD172a, SIRPalpha2, MFR, SIRP-	signal-regulatory protein alpha	<a href="#">P78324</a>	Non-modified		Human		Rabbit
SLAMF1	CD150	signaling lymphocytic activation molecule family member 1	<a href="#">Q13291</a>	Non-modified		Human		Rabbit
SLAMF7	CRACC, 19A, CS1, CD319	SLAM family member 7	<a href="#">Q9NQ25</a>	Non-modified		Human		Rabbit
SPARC	BM-40, OI17, ON	SPARC	<a href="#">P09486</a>	Non-modified		Human		Mouse
SQSTM1		Sequestosome-1	<a href="#">Q13501</a>	Non-modified		Human		Mouse
STAT2	IMD44, ISGF-3, P113, STAT113	Signal transducer and activator of transcription 2	<a href="#">P52630</a>	Non-modified		Human		Mouse
STAT3	APRF	signal transducer and activator of transcription 3 (acute-phase response factor)	<a href="#">P40763</a>	Phosphorylation	pY705	Human		Rabbit
STAT5A	MGF	signal transducer and activator of transcription 5A	<a href="#">P42229</a>	Phosphorylation	pS780	Human		Rabbit
STAT5B		signal transducer and activator of transcription 5B	<a href="#">P51692</a>	Phosphorylation	pS193	Human		Rabbit
TBK1		TANK-binding kinase 1	<a href="#">Q9UHD2</a>	Non-modified		Human		Rabbit
TCOF1	MFD1, TCS, TCS1, treacle	Treacle protein	<a href="#">Q13428</a>	Non-modified		Human		Mouse
TMEM173	FLJ38577, NET23, ERIS, MPYS, STING, MITA	transmembrane protein 173	<a href="#">Q86WV6</a>	Phosphorylation	pS358	Human		Rabbit
TREX1		three prime repair exonuclease 1	<a href="#">Q9NSU2</a>	Non-modified		Human		Rabbit
TXN	TRDX, TRX, TRX1	Thioredoxin	<a href="#">P10599</a>	Non-modified		Human		Mouse
XPA		DNA repair protein complementing XP-A cells	<a href="#">P23025</a>	Non-modified		Human		Rabbit
YTHDF2		YTH domain-containing family protein 2	<a href="#">Q9Y5A9</a>	Non-modified		Human		Rabbit