

Cells or Tissues		ERV DETECTED												DETECTION METHODS										REFERENCE
TYPE	ORIGIN	NOMENCLATURE	TYPE												(g)DNA	(m)RNA	Protein	VLP	VINf	VRC				
			1 refers to a positive signal																					
			(g)DN		RNA		Protei		VLP		VINf		VRC											
C	SN	C	SN	C	SN	C	SN	C	SN	C	SN	C	SN											
aged DBA/2 mice (in vivo; tissue)	Mus musculus	rv-DBA/2	1	-	-	-	-	-	-	-	-	-	-	Sanger sequencing, PCR (cells)	-	-	-	-	-	Bartman et al., 1995				
B-lymphoblastic lymphoma cell line (Reh)	Homo sapiens	HERV-H/F	1	-	1	-	-	-	-	-	-	-	-	EGFP reporter gene assay, Southern Blot (cells)	Northern blot, RT-PCR (cells)	-	-	-	-	Patzke et al., 2002				
Bovine thyroid glandular cells (tissue)	Bos taurus	BoERV	-	-	1	-	-	-	-	-	-	-	-	-	Expression sequence tag mining (EST-mining)	-	-	-	-	Garcia-Etxebarria et al., 2014				
Braf V600E Melanoma cells (primary)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	1	1	-	-	1	-	-	-	-	RT-qPCR (cells and supernatant)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018				
Brain (tissue)	Sus scrofa	PERV, PERV-A	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohistochemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012				
Breast adenocarcinoma cell line (MDA-MB-321)	Homo sapiens	HERV-W	-	-	1	-	1	-	-	-	-	-	-	-	RT-PCR, RNA sequencing (cells)	Western Blot (tissue cells)	-	-	-	Bjerregaard et al., 2006				
Breast cancer cells (tissue)	Homo sapiens	HERV-FRD; HERV-E; HERV-H; HERV-F; HERV-K (HML-1-6,8,10); HERV-L; HERV-W; HERV-R; ERV9	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR, microarray (tissue)	-	-	-	-	Frank et al., 2008				
Chicken embryo fibroblast cell line (CEF)	Gallus gallus	Avian endogenous retrovirus	-	-	-	1	-	-	-	1	-	-	-	-	Microarray, RT-PCR, cDNA sequencing (supernatant: vaccine)	-	RT-PCR, microarray, cDNA sequencing (supernatant: vaccine)	-	-	Victoria et al., 2010				
colon adenocarcinoma cell line (DKO)	Homo sapiens	HERV-W1 (ERVWE1)	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR, TAG-aided sense/antisense detection (TASA-TD) PCR (cells)	-	-	-	-	Chiappinelli et al., 2015				
colon adenocarcinoma cell line (HCT116)	Homo sapiens	HERV-Fc2	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR, TAG-aided sense/antisense detection (TASA-TD) PCR (cells)	-	-	-	-	Chiappinelli et al., 2015				
Cyto/syncytiotrophoblast cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohistochemistry (tissue)	-	-	-	Fei et al., 2014				

Dendritic cell line (DC2.4)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	1	1	-	-	-	-	-	-	-	RT-qPCR (cells and supernatant)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
Dendritic cell line (JAWSII)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	1	1	-	-	-	-	-	-	-	RT-qPCR (cells and supernatant)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
Duodenum epithelial cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohisto-chemistry (tissue)	-	-	-	Fei et al., 2014
Embryonal carcinoma cell line (Tera-1)	Homo sapiens	HERV-K (HML-2)	1	-	1	1	-	-	-	1	-	-	-	-	PCR, LTR reporter assay (cells)	qPCR (cells), RNA-sequencing (cells and supernatant)	RNA-seq (supernatant)	-	-	Bhardwaj et al., 2015
Embryonal carcinoma cell line (Tera-1)	Homo sapiens	HERV-K	-	-	-	1	-	-	-	1	-	-	-	-	RT-qPCR (supernatant)	-	RT-qPCR, UNG-treatment coupled to RT-qPCR (supernatant)	-	-	Dube et al., 2014
Embryonal carcinoma cell line (Tera-1)	Homo sapiens	HERV-K (HML-2), HERV-K113		-		1			-		-	-	-	PCR (cells)	RT-PCR (cells and supernatant)	Western Blot (supernatant), Immunocyto-chemistry (cells)	RT-PCR, RT-qPCR, western blot (supernatant)	-	-	Ruprecht et al., 2008
Embryonal fibroblast cell line (NIH/3T3)	Mus musculus	BC005512	-	-	1	-	-	-	-	-	-	-	-	-	qPCR, microarray (cells)	-	-	-	-	Wu et al., 2012
Embryonic kidney cell line (HEK 293)	Homo sapiens	HERV-W	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (cells)	Western Blot (cells)	-	-	-	Machnik et al., 2014
endocrine adult pig pancreatic islet populations (primary)	Sus scrofa	Porcine endogenous retrovirus (PERV)	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR (cells)	SG-PERT (supernatant)	SYBR-Green PCR enhanced reverse-transcriptase assay (SG-PERT) and RT-qPCR (supernatant)	-	-	Mourad et al., 2017
endocrine piglet pancreatic islet populations (primary)	Sus scrofa	Porcine endogenous retrovirus (PERV)	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR (cells)	SG-PERT (supernatant)	SG-PERT and RT-qPCR (supernatant)	-	-	Mourad et al., 2017
Endometrial adenocarcinoma cell line (HEC-1-A)	Homo sapiens	HERV-W1 (ERVWE1)	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (cells)	Western Blot (cells)	-	-	-	Liu et al., 2019
Endometrial adenocarcinoma cell line (KLE)	Homo sapiens	HERV-W1 (ERVWE1)	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (cells)	Western Blot (cells)	-	-	-	Liu et al., 2019
Endometrial adenosquamous carcinoma cell line (RL-95-2)	Homo sapiens	HERV-W1 (ERVWE1)	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (cells)	Western Blot (cells)	-	-	-	Liu et al., 2019
exocrine adult pig pancreatic islet populations (primary)	Sus scrofa	Porcine endogenous retrovirus (PERV)	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR (cells)	SG-PERT (supernatant)	SG-PERT and RT-qPCR (supernatant)	-	-	Mourad et al., 2017

exocrine piglet pancreatic islet populations (primary)	Sus scrofa	Porcine endogenous retrovirus (PERV)	-	-	1	-	-	-	-	-	-	-	-	RT-qPCR (cells)	SG-PERT (supernatant)	SG-PERT and RT-qPCR (supernatant)	-	-	Mourad et al., 2017
Finite Fetal lung fibroblast cell line (MRC-5)	Homo sapiens	HERV-K	-	-	-	1	-	-	-	1	-	-	-	Microarray, RT-PCR, cDNA sequencing (supernatant: vaccine)	-	RT-PCR, microarray, cDNA sequencing (supernatant: vaccine)	-	-	Victoria et al., 2010
Finite Fetal lung fibroblast cell line (WI-38)	Homo sapiens	HERV-K	-	-	-	-	-	-	-	-	-	-	-	Microarray, RT-PCR, cDNA sequencing (supernatant: vaccine)	-	RT-PCR, microarray, cDNA sequencing (supernatant: vaccine)	-	-	Victoria et al., 2010
Foetal fibroblast cell line (AH927)	Felis silvestris catus	ERV-DC10 (C1q21)	1	-	-	-	-	-	-	-	-	-	CpG methylation analysis, LTR luciferase activity assay, FISH (cells)	-	-	-	-	-	Kuse et al., 2016
Gastrointestinal: stomach, small intestine (tissue)	Sus scrofa	PERV, PERV-C	-	-	1	-	1	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohistochemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012
Gestational choriocarcinoma cell line (BeWo)	Homo sapiens	HERV-W, HERV-FRD	-	-	1	-	1	-	-	-	-	-	-	RT-qPCR, ribonuclease protection assay (cells)	Western Blot (cells)	-	-	-	Chen et al., 2008
Giant cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	Immunohistochemistry (tissue)	-	-	-	Fei et al., 2014
Harding-Passey melanoma cells (primary)	Mus musculus	Type-C virus-like particles	-	-	-	-	-	-	1	-	-	-	-	-	ELISA, flow cytometry (cells)	TEM (cells)	-	-	Leong et al., 1988
HCmel3 melanoma cells (primary)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	-	1	-	-	1	-	-	-	RT-qPCR (cells)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
HCmel12 melanoma cells (primary)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	1	1	-	-	1	-	-	-	RT-qPCR (cells and supernatant), cDNA sequencing (supernatant)	Flow cytometry (cells)	RT-qPCR, cDNA sequencing (supernatant)	-	-	Ottina et al., 2018
HCmel17 melanoma cells (primary)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	-	1	-	-	1	-	-	-	RT-qPCR (cells)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
HCmel31 melanoma cells (primary)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	-	1	-	-	-	-	-	-	RT-qPCR (cells)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
Heart (tissue)	Sus scrofa	PERV	-	-	1	-	1	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohistochemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012

Hepatocytes (primary)	Sus scrofa	Porcine endogenous retrovirus (PERV)	1	-	-	-	1	-	-	-	-	-	-	PCR (tissue)	-	Immunohisto-chemistry (tissue)	-	-	-	Han et al., 2015
HPV16-transformed endometrial glandular epithelial cell line (EM-E6/E7-TERT)	Homo sapiens	HERV-W1 (ERVWE1)	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (cells)	Western Blot (cells)	-	-	-	Liu et al., 2019
HPV-related endocervical adenocarcinoma cell line (HeLa)	Homo sapiens	MER41	1	-	-	-	-	-	-	-	-	-	-	CRISPR-Cas9 knock-out (cells)	-	-	-	-	-	Chuong et al., 2016
Immature spermatogonia (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohisto-chemistry (tissue)	-	-	-	Fei et al., 2014
Invasive breast carcinoma cell line (MCF-7)	Homo sapiens	HERV-W	-	-	1	-	1	-	-	-	-	-	-	-	RT-PCR, qPCR and RNA sequencing (cells)	Immunohisto-chemistry, Western Blot (tissue cells)	-	-	-	Bjerregaard et al., 2006
Kidney (tissue)	Sus scrofa	PERV	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohisto-chemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012
Kidney epithelial cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohisto-chemistry (tissue)	-	-	-	Fei et al., 2014
Large B-cell lymphoma cell line (2695)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	-	1	-	-	1	-	-	-	-	RT-qPCR (cells)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
kidney cell line (PK-15)	Sus scrofa	PERV-A, PERV-B	-	-	1	1	1	1	-	1	1	1	1	-	RT-qPCR (cells and supernatant (target cells))	Immunofluorescence (cells), ELISA (cells and supernatant target cells), RT-activity assay (supernatant (target cells))	TEM, RT-activity assay, RT-qPCR (supernatant)	infection assay (target cells), RT-qPCR (supernatant target cells)	Re-infection assay (target cells), RT activity assay (supernatant target cells)	Godehardt et al., 2020; Kim et al., 2015
Liver (tissue)	Sus scrofa	PERV	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohisto-chemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012
Liver epithelial cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohisto-chemistry (tissue)	-	-	-	Fei et al., 2014
Lung (tissue)	Sus scrofa	PERV, PERV-A, PERV-C	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohisto-chemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012
Colon adenocarcinoma cell line (MCA-38)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	1	1	-	-	1	1	-	1	-	RT-qPCR (cells and supernatant), cDNA sequencing (supernatant)	Flow cytometry (cells)	RT-qPCR, cDNA sequencing (supernatant)	In vivo inoculation (animal), marker assay (target cells)	In vivo inoculation (animal), marker rescue assay (target cells)	Ottina et al., 2018
Lung adenocarcinoma cell line (A549)	Homo sapiens	DEHERVs: ERV-class I, ERV-class II, ERV-class III, Gypsy, unclassified	-	-	1	-	-	-	-	-	-	-	-	-	RNA-sequencing (cells)	-	-	-	-	Wang et al., 2020

Lung malignant tumour cell line (LL/2)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	-	1	-	-	1	-	-	-	-	RT-qPCR (cells)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
Lymphnodes (tissue)	Sus scrofa	PERV, PERV-A, PERV-C	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohisto-chemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012
Fibrosarcoma cell line (MCA-205)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	1	1	-	-	1	1	-	1	-	RT-qPCR (cells and supernatant), cDNA sequencing (supernatant)	Flow cytometry (cells)	RT-qPCR, cDNA sequencing (supernatant)	In vivo inoculation (animal), marker assay (target cells)	In vivo inoculation (animal), marker rescue assay (target cells)	Ottina et al., 2018
Lymphoblastoid cell line	Homo sapiens	HERV-K (HML-2)	1	-	-	-	-	-	-	-	-	-	-	DNA sequencing, genome-wide amplification of proviral sequences (GAPS) (cells)	-	-	-	-	-	Macfarlane et al., 2015
Mammary gland cells (primary)	Mus musculus	Mouse Mammary Tumour Virus (MMTV)	1	-	1	-	-	-	-	-	-	-	-	Southern Blotting (tissue)	RNAse T1 protection assay (cells)	-	-	-	-	Golovkina et al., 1994
Melanoma cell line (B16 B15b)	Mus musculus	NR	-	-	-	-	1	-	-	-	-	-	-	-	-	ELISA, flow cytometry (cells)	TEM (cells)	-	-	Leong et al., 1988
Melanoma cell line (B16 BL6)	Mus musculus	NR	-	-	-	-	1	-	-	-	-	-	-	-	-	ELISA, flow cytometry (cells)	TEM (cells)	-	-	Leong et al., 1988
Melanoma cell line (B16 F10)	Mus musculus	Type-C virus-like particles	-	-	-	-	1	-	1	-	-	-	-	-	-	ELISA, flow cytometry (cells)	TEM (cells)	-	-	Leong et al., 1988
Melanoma cell line (B16 FLR)	Mus musculus	NR	-	-	-	-	1	-	-	-	-	-	-	-	-	ELISA, flow cytometry (cells)	TEM (cells)	-	-	Leong et al., 1988
Melanoma cell line (B16 O13)	Mus musculus	NR	-	-	-	-	1	-	-	-	-	-	-	-	-	ELISA, flow cytometry (cells)	TEM (cells)	-	-	Leong et al., 1988
Melanoma cell line (B16-F0)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	-	1	-	-	1	-	-	-	-	RT-qPCR (cells)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
Myocardium cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohisto-chemistry (tissue)	-	-	-	Fei et al., 2014
Non-HIV-infected lymphoma blood plasma (primary)	Homo sapiens	HERV-K	-	1	-	1	-	1	-	1	-	-	-	Long-range PCR (supernatant)	RT-qPCR (supernatant)	Immunoprecipitation (supernatant)	immuno-precipitation + long-range PCR, RT-qPCR (supernatant)	-	-	Dube et al., 2014
Ovary (tissue)	Sus scrofa	PERV	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohisto-chemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012
Pancreas (tissue)	Sus scrofa	PERV, PERV-C	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohisto-chemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012

PBMC (primary)	Felis silvestris catus	ERV-DC1-8; ERV-DC16; ERV-DC17; ERV-DC19	1	-	-	-	-	-	-	-	-	-	-	PCR, FISH (cells)	-	-	-	-	-	Anai et al., 2012
Large granular lymphoma cell line (MCC)	Felis silvestris catus	RD-114	1	-	-	-	-	-	-	1	-	1	-	PCR (cells)	-	-	-	pseudotype virus infection assay (target cells)	LacZ marker rescue assay (target cells)	Okada et al., 2011
Spontaneously immortalized fibroblast cell line (FER)	Felis silvestris catus	RD-114	1	-	-	-	-	-	-	1	-	1	-	PCR (cells)	-	-	-	pseudotype virus infection assay (target cells)	LacZ marker rescue assay (target cells)	Okada et al., 2011
Spontaneously immortalized kidney cell line (CRFK)	Felis silvestris catus	RD-114	1	-	-	1	-	-	-	1	-	1	-	PCR, DNA-sequencing (cells)	RT-qPCR (supernatant)	-	RT-qPCR (supernatant)	pseudotype virus infection assay (target cells)	LacZ marker rescue assay (target cells)	Okada et al., 2011; Shimode et al., 2022
PBMC (primary)	Felis silvestris catus	ERV-DC10	1	-	-	-	1	-	-	-	-	-	-	PCR, Southern Blot, FISH (cells)	-	Western Blot (cells)	-	-	-	Anai et al., 2012
PBMC (primary)	Felis silvestris catus	ERV-DC18	1	-	-	-	1	-	-	-	-	-	-	PCR, FISH (cells)	-	Western Blot (cells)	-	-	-	Anai et al., 2012
PBMC (primary)	Felis silvestris catus	ERV-DC14 (C1q32)	1	-	-	-	-	-	-	-	-	-	-	PCR, FISH (cells)	-	-	-	-	-	Anai et al., 2012; Kuse et al., 2016
PBMC (primary)	Phascolarctos cinereus	Koala retrovirus	1	-	-	-	-	-	-	-	-	-	-	Southern Blotting, PCR (cells)	-	-	-	-	-	Tarlinton et al., 2006
PBMC (primary) derived B-cell lymphoblastoid cell line (LCL)	Homo sapiens	HERV-W1 (ERVWE1); HERV-K	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR, RNA-sequencing (cells)	-	-	-	-	Wieland et al., 2022
peripheral blood mononuclear cells (PBMCs) (primary)	Sus scrofa	PERV-A, PERV-B, PERV-C	-	-	-	1	-	1	-	1	-	-	-	-	RT-qPCR (supernatant)	RT-activity assay (supernatant)	RT-qPCR virus pellet, RT-activity assay (supernatant)	Infectivity assay (supernatant)	-	Bittman et al., 2012
peripheral blood mononuclear cells (PBMCs) (primary)	Sus scrofa	Porcine endogenous retrovirus (PERV)	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR (cells)	-	-	-	-	Mourad et al., 2017
Peripheral blood mononuclear cells (primary)	Homo sapiens	HERV-W1	-	-	1	-	-	-	-	-	-	-	-	-	RT-qPCR, RNA-sequencing (cells)	-	-	-	-	Wieland et al., 2022
Placenta (primary)	Homo sapiens	HERV-K, HERV-K10	1	-	1	-	-	-	1	-	-	-	-	Southern Blotting (tissue)	RT-PCR, cDNA sequencing (ultracentrifuged lysed cells)	-	RT-PCR, cDNA sequencing (ultra-centrifugated lysed cells)	-	-	Simpson et al., 1996
Precursor T-cell lymphoblastic lymphoma cell line (E.G7-OVA (EL4))	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (cells)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018

Precursor T-cell lymphoblastic lymphoma cell line (EL/4.BU)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	1	1	-	-	1	-	-	-	-	RT-qPCR (cells and supernatant), cDNA sequencing (supernatant)	Flow cytometry (cells)	RT-qPCR, cDNA sequencing (supernatant)	-	-	Ottina et al., 2018
Prostate carcinoma cell line (CWR-R1)	Homo sapiens	Xenotropic murine leukemia virus-related virus (XMRV), PreXMRV-1, PreXMRV-2	1	-	1	-	-	-	-	-	-	-	-	qPCR (cells)	RT-qPCR (cells)	-	-	-	-	Paprotka et al., 2011
Purkinje cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohistochemistry (tissue)	-	-	-	Fei et al., 2014
Sebaceous glands (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohistochemistry (tissue)	-	-	-	Fei et al., 2014
Skin (tissue)	Sus scrofa	PERV, PERV-C	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohistochemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012
Invasive breast carcinoma cell line (MCF-7)	Homo sapiens	HERV-K (HML-2)	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	infection assay (target cells)	-	Contreras-Galindo et al., 2015
Spermatozoa (primary)	Phascolarctos cinereus	Koala retrovirus	1	-	-	-	-	-	-	-	-	-	-	FISH, PCR (cells)	-	-	-	-	-	Tarlinton et al., 2006
Spleen (tissue)	Sus scrofa	PERV, PERV-A, PERV-C	-	-	1	-	1	-	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohistochemistry, Western Blot (cells)	-	-	-	Bittman et al., 2012
Spontaneously immortalized kidney epithelial cell line (Vero 0111)	Chlorocebus sabaeus	Simian endogenous retrovirus (SERV)	1	-	1	-	-	-	-	-	-	-	-	Nested PCR (cells)	RNA-sequencing (cells)	-	-	-	-	Sakuma et al., 2018
Spontaneously immortalized kidney epithelial cell line (Vero CCL-81)	Chlorocebus sabaeus	Simian endogenous retrovirus (SERV)	1	-	1	-	-	-	-	-	-	-	-	Nested PCR (cells)	RNA-sequencing (cells)	-	-	-	-	Sakuma et al., 2018
Spontaneously immortalized kidney epithelial cell line (Vero)	Chlorocebus sabaeus	Baboon endogenous retrovirus (BaERV)	-	-	-	-	-	-	-	-	-	-	-	-	Microarray, RT-PCR, cDNA sequencing (supernatant: vaccine)	-	RT-PCR, microarray, cDNA sequencing (supernatant: vaccine)	-	-	Victoria et al., 2010
Spontaneously immortalized kidney epithelial cell line (Vero-76)	Chlorocebus sabaeus	Simian endogenous retrovirus (SERV)	1	-	1	-	-	-	-	-	-	-	-	Nested PCR (cells)	RNA-sequencing (cells)	-	-	-	-	Sakuma et al., 2018
Spontaneously immortalized ovarian epithelial cell line (CHO-K1)	Cricetulus griseus	Type-C ERV which shares 64% sequence similarity with the murine leukaemia virus	1	-	1	1	-	-	-	1	-	-	-	Deep amplicon sequencing, FISH (cells)	RNA-sequencing (cells and supernatant), RT-PCR, qPCR (supernatant)	-	RT-PCR, qPCR, RNA-seq (supernatant)	-	-	Duroy et al., 2020

Prostate carcinoa cell line (PC3)	Homo sapiens	HERV-W1 (ERVWE1)	-	-	1	-	1	1	-	-	1	-	-	-	-	RT-qPCR (cells)	Western Blot (cells and supernatant (EMVs)), ELISA, immunodepletion assay (supernatant), immunofluorescence, gene transfer assay (cells)	-	co-culturing experiment (target cells)	-	Uygur et al., 2019
Squamous skin cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	-	Immunohisto-chemistry (tissue)	-	-	-	Fei et al., 2014
Striated muscle cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	-	Immunohisto-chemistry (tissue)	-	-	-	Fei et al., 2014
Prostate carcinoma cell line (CWR22Rv1)	Homo sapiens	Xenotropic murine leukemia virus-related virus (XMRV)	1	-	1	1	-	-	1	1	1	-	1	1	PCR, qPCR, DNA-sequencing (cells)	RT-qPCR (cells and supernatant)	-	RT-qPCR (supernatant), TEM (cells)	PCR (target cells)	Marker rescue assay (cells), RT-qPCR (supernatant)	Paprotka et al., 2011; Curriu et al., 2012; Knouf et al., 2009
Tail fibroblasts (primary)	Mus dunni	Mus dunni endogenous retorivurs (MDEV)	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	Marker rescue assay (target cells)	-	-	Miller et al., 1996
T-cell lymphoma cell line (CTLL-2)	Mus musculus	endogenous Murine Leukemia virus (eMLV)	-	-	1	-	1	-	-	-	-	-	-	-	-	RT-qPCR (cells)	Flow cytometry (cells)	RT-qPCR (supernatant)	-	-	Ottina et al., 2018
Testicular embryonal carcinoma cell line (GH)	Homo sapiens	HERV-K10	1	-	1	-	-	-	1	-	-	-	-	-	Southern Blotting (cells)	RT-PCR, cDNA sequencing (ultracentrifuged lysed cells)	-	RT-PCR (ultracentrigate d lysed cells)	-	-	Simpson et al., 1996
Testicular embryonal carcinoma cell line (NCCIT)	Homo sapiens	HERV-W, HERV-H	-	-	1	1	-	-	-	1	-	-	-	-	-	RT-qPCR (cells; HERV-W), RT-qPCR (cells and supernatant; HERV-H)	-	RT-qPCR (supernatant; HERV-H)	-	-	Contreras-Galindo et al., 2015
Testicular germ cells of semeniferous ducts (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	-	Immunohisto-chemistry (tissue)	-	-	-	Fei et al., 2014

Testicular embryonal carcinoma cell line (NCCIT)	Homo sapiens	HERV-K	1	1	1	1	1	1	1	1	-	-	-	Long-range PCR (supernatant), inverse-PCR, DNA-sequencing (cells)	RT-qPCR (cells), in-virion reverse transcriptase assay (supernatant)	Western Blot, immunoprecipitation (supernatant), reverse transcriptase-inhibition assay (cells)	immuno-precipitation, In-virion reverse transcriptase assay (supernatant), TEM, immuno-electron microscopy (cells), Western Blot, UNG-treatment coupled to RT-qPCR (supernatant)	Marker rescue assay, re-infection assay (target cells)	-	Dube et al., 2014; Contreras-Galindo et al., 2015
Thyroid gland epithelial cells (tissue)	Homo sapiens	ERV3 (7q11.21)	-	-	-	-	1	-	-	-	-	-	-	-	-	Immunohistochemistry (tissue)	-	-	-	Fei et al., 2014
Uterus (tissue)	Sus scrofa	PERV	-	-	1	-	1	-	-	-	-	-	-	RT-qPCR (tissue cells)	Immunohistochemistry, Western Blot (cells)	-	-	-	-	Bittman et al., 2012

	DNA		RNA		P		VLP		VINP		VRC	
Method detected parameter	C	SN	C	SN	C	SN	C	SN	C	SN	C	SN
Method did not detect parameter	27	2	64	20	60	6	7	23	10	1	5	4
	0	0	0	2	1	4	3	11	0	1	0	0

	DNA	RNA	P	VLP	VINF	VRC
Number of entries per successful detection	28	70	62	28	10	7