

**S1 | Host-pathogen interactions studied using microarrays.**

Pathogen type	Pathogen order	Pathogen species	Pathogen mutant	Pathogen component	Cell type
Bacteria				D-mannose, f-MLP, muramyl dipeptide	Macrophage
Bacteria	Actinomycetales	Mycobacterium bovis & tuberculosis	Heat-killed	hsp65, hsp70	DC, lung, macrophage
Bacteria (gram -ve)	Burkholderiales	Bordetella pertussis	AC-, avirulent, heat-killed, PT-	LPS	Epithelial cell, macrophage, PBMC
Bacteria (gram -ve)	Burkholderiales	Burkholderia cepacia			Neutrophil
Bacteria (gram -ve)	Campylobacteriales	Helicobacter pylori, felis and heilmannii	cagA-, cagE-, cagN-, PAI-, vacA-	Hsp60	Epithelial cell, monocyte, PBMC, stomach
Bacteria (gram -ve)	Chlamydiales	Chlamydia pneumoniae & trachomatis			Epithelial cell, macrophage
Bacteria (gram -ve)	Enterobacteriales	Escherichia coli	Aflagellate, heat-killed	LPS	Bladder, DC, epithelial cell, lung, macrophage, neutrophil, PBMC
Bacteria (gram -ve)	Enterobacteriales	Salmonella dublin, minnesota, typhi, & typhimurium	FlhB-/flhC-, flhD- (aflagellate), flhD- (immotile), invA-, invG-, phoP-, spi1-	Flagellin, LPS	Epithelial cell, macrophage
Bacteria (gram -ve)	Enterobacteriales	Yersinia enterocolitica	Avirulent (pYV-), yopM-, yopP-, inv-		Epithelial cell, macrophage
Bacteria (gram -ve)	Legionellales	Coxiella burnetii			Macrophage
Bacteria (gram -ve)	Legionellales	Legionella pneumophila	Avirulent		Macrophage
Bacteria (gram -ve)	Neisseriales	Neisseria gonorrhoeae & meningitidis			Epithelial cell, whole blood
Bacteria (gram -ve)	Pseudomonadales	Pseudomonas aeruginosa	Non-piliated		Epithelial cell
Bacteria (gram -ve)	Rickettsiales	Ehrlichia chaffeensis			Macrophage
Bacteria (gram -ve)	Spirochaetales	Borrelia hermsii			Neutrophil
Bacteria (gram +ve)	Bacillales	Listeria monocytogenes			Macrophage, neutrophil
Bacteria (gram +ve)	Bacillales	Staphylococcus aureus	Heat-killed	LTA, protein A, peptidoglycan	Brain, macrophage, monocyte, neutrophil, PBMC
Bacteria (gram +ve)	Lactobacillales	Streptococcus pneumoniae & pyogenes	Pneumolysin-		Macrophage, neutrophil
Fungus	Saccharomycetales	Candida albicans, Saccharomyces cerevisiae		Mannan	DC
Helminth	Spirurida	Brugia malayi			DC, macrophage
Protozoa	Eimerida	Toxoplasma gondii			DC, macrophage
Protozoa	Kinetoplastida	Leishmania chagasi, donovani & major			DC, macrophage
Protozoa	Strigeidida	Schistosoma japonicum & mansoni			Liver, T-cell
Virus				Poly I:C	DC, glial cell
Virus	dsDNA	Adenovirus types 2, 5 & 12			Epithelial cell, kidney cell, retinal cell
Virus	dsDNA	Epstein-Barr virus (EBV)		BZLF1, EBNA-2, EBNA-LP, LMP-1	B-cell, epithelial cell, keratinocyte
Virus	dsDNA	Herpes simplex virus 1 (HSV-1)	d106, d109, ICP34.5-, UL54-, UV-inactivated, VP16 & ICP0-	ICP0	Epithelial cell, fibroblast, glia, trigeminal ganglia
Virus	dsDNA	Human cytomegalovirus (HCMV)	UL83-, UV-inactivated	gB, IE86	Fibroblast, granulocyte-macrophage progenitor
Virus	dsDNA	Human herpesvirus 6A & 6B			T-cell
Virus	dsDNA	Kaposi's sarcoma-associated herpesvirus (KSHV)		LANA1, vGPCR	B-cell, bone marrow stem cell, endothelial cell, fibroblast
Virus	dsDNA	Varicella-Zoster virus (VZV)			Fibroblast, skin, T-cell
Virus	dsDNA	Bovine papillomavirus		E2	Epithelial cell
Virus	dsDNA	Human papillomavirus 16 & 31		E6, E7	Keratinocyte
Virus	dsDNA	JC virus			Astrocyte
Virus	dsDNA	Vaccinia virus			Epithelial cell
Virus	dsDNA-RT	Hepatitis B virus (HBV)		HBx	Liver, hepatocyte
Virus	dsRNA	Reovirus serotypes 1 & 3			Epithelial cell
Virus	dsRNA	Rhesus rotavirus			Epithelial cell
Virus	ssRNA-	Hantavirus			Endothelial cell
Virus	ssRNA-	Influenza virus	Heat-inactivated, NS1-		DC, epithelial cell
Virus	ssRNA-	Measles virus			PBMC
Virus	ssRNA-	Pneumonia virus of mice (PVM)			Lung
Virus	ssRNA-	Respiratory syncytial virus (RSV)			Epithelial cell
Virus	ssRNA+	Coxsackievirus B3 & B4			Epithelial cell, heart
Virus	ssRNA+	Dengue virus			Endothelial cell
Virus	ssRNA+	Echovirus 1			Osteoblast
Virus	ssRNA+	Enterovirus 71			Neuron
Virus	ssRNA+	Hepatitis C virus (HCV)		NS5A	Epithelial cell, hepatocyte, liver
Virus	ssRNA+	Poliovirus			Epithelial cell
Virus	ssRNA+	Sindbis virus			Brain
Virus	ssRNA-RT	Human foamy virus (SFVcpz(hu))			Fibroblast
Virus	ssRNA-RT	Human immunodeficiency virus-1 (HIV-1)	Heat-inactivated, Vpr-	Gp120, Nef, Tat	Astrocyte, DC, epithelial cell, jejunum, macrophage, PBMC, T-cell, thymus
Virus	ssRNA-RT	Human T-cell leukaemia virus-1 (HTLV-1)			T-cell

A more detailed version of this table, including references, can be found as **supplementary information S2** (table). – denotes a deficiency in this viral gene or protein. AC - adenylate cyclase, cag - H. pylori pathogenicity island, DC - dendritic cell, EBNA - Epstein-Barr nuclear antigen, f-MLP - formyl-methionine-leucine-phenylalanine, gB - glycoprotein B, HBx - Hepatitis B virus X protein, hsp - heat shock protein, ICP - infected cell protein, IE - immediate early, inv - invasin, LANA - latent nuclear antigen, LMP - latent membrane protein, LP - leader protein, LPS - lipopolysaccharide, LTA, lipoteichoic acid, Nef - negative factor, NS - non-structural, PAI - pathogenicity island, PBMC - peripheral blood mononuclear cell, PT - pertussis toxin, spi - Salmonella pathogenicity island, Tat - transactivator, vac - vacuolating cytotoxin, vGPCR - viral G-protein coupled receptor, Vpr - viral protein R, yop - yersinia outer membrane protein.