Table 9.1 Summary of known viroporin characteristics. Viroporins are encoded by numerous viruses from many different families, including both RNA and DNA viruses. This table summarises current consensus from the literature regarding viroporin function, size (AA, amino acids), ion specificity (Ion?) and the number of *trans*-membrane domains (TM).

Class	*Family*	*Virus*	*Name*	*AA*	*TM*	*Ion?*	*Role of Channel Activity*
ssRNA (+)	*Picornaviridae*	Poliovirus	2B	97	2	Ca^{2+}	Particle Production, cell lysis
			VP4	68	1	-	Entry
		Coxsackievirus B3	2B	99	2	Ca^{2+}	Particle Production, cell lysis
		EV71	2B	99	2	Cl^{-}	Virus Spread
		Human Rhinovirus	VP4	68	1	-	Entry
	Flaviviridae	Hepatitis C virus	p7	63	2	H^{+}	Particle Production, Entry?
		BVDV	p7	63	2	$?H^{+}$	Particle Production
		CSFV	p7	63	2	-	Particle Production
		Dengue Virus	M	75	1	K^{+}/Na^{+}	Particle Production
	Togaviridae	Semliki Forest Virus	6K	60	2	K^{+}/Na^{+}	Particle Production
		Sindbis Virus	6K	55	1*	K^{+}/Na^{+}	Particle Production
		Ross River Virus	6K	62	1*	K^{+}/Na^{+}	Particle Production
	Coronaviridae	SARS CoV	E	76	1	K^{+}/Na^{+}	Particle Production
			3a	274	3	K^{+}	Virus Spread
			8a	39	1	K^{+}/Na^{+}	-
		MHV	E	83	1	K^{+}/Na^{+}	Particle Production
ssRNA(-)	*Paramyxoviridae*	hRSV	SH	64	1	K^{+}/Na^{+}	TNF antagonist, Pathogenesis
	Orthomyxoviridae	Influenza A virus	M2	97	1	H^{+}	Entry, Particle Production (some)
		Influenza B virus	BM2	115	1	H^{+}	Entry, Particle Production (some)
			NB	100	1	H^{+}	-
		Influenza C virus	CM2	115	1	H^{+}	Entry, Particle Production (some)
dsRNA	*Reoviridae*	Rotavirus	NSP4	175	1/3	Ca^{2+}	Particle Production, Endotoxin
RT (RNA)	*Retroviridae*	HIV-1	Vpu	81	1	K^{+}/Na^{+}	Particle Production
		HTLV-1	P13ii	87	2	$?K^{+}$	Mitochondrial Permeability
dsDNA	*Polyomaviridae*	SV40	VP4	125	1	Ca^{2+}	Particle Production
		JC	Agno	71	1	Ca^{2+}	Particle Production
	Papillomaviridae	HPV-16	E5	83	3	$? H^{+}$	Oncogene, Signalling/Trafficking

Symbols: *, indicates computer prediction data only; ?, Indicates inferred from indirect assays.
Abbreviations: AA, number of amino acid residues; TM, number of *trans*-membrane domains; Ion, consensus ion species specificity based on available literature; EV71, enterovirus 71; BVDV, bovine viral diarrhoea virus; CSFV, classical swine fever virus; SARS CoV, severe acute respiratory distress syndrome-associated coronavirus; MHV, murine hepatitis virus; hRSV, human respiratory syncitial virus; HIV-1, human immunodeficiency virus type 1; HTLV-1, human T-lymphotropic virus type 1; SV40, simian vacuolating virus 40; JC, John Cunningham polyomavirus; HPV-16, human papillomavirus type 16.