Summary of viral genes involved in the control of host defense system.

	Innate Immune System			Adaptive Immune System			
	Cytokine	Chemokine	MHC Class I Homologs	Antigen Presentation Pathway	Antibody Interference	Apoptosis	Other Pathways
Poxvirus	IL-10; IL-18-BP; IL-1 β-R; INF-R; TNF-R; CD30; CD150 (SLAM); CD200 (OX-2)	Chemokine; Chemokine-R	MHC class I	LAP domain (MHC class I down regulation)		Ankyrin; Bcl-2; FLIP; dsRNA-biding protein; eIF2α; M-T4; Apoptosis regulator M11L; Glutathione peroxidase; Serpin; C- type lectin	Semaphorines; Complement-binding protein; CD47
α-herpesvirus				ICP47 (inhibits peptide loading)	Fc-binding protein	ICP34.5 (GADD34); Glycoprotein J; RNA- binding protein interacting with PKR	Complement- regulatory protein
β -herpesvirus	IL-10; TNF-R; CD200 (OX-2)	Chemokine; Chemokine-R	MHC class I	MCMV/gp48 (directs MHC class I to lysosome); MCMV/gp40 (downregulates MHC class I); HCMV/US11 (causes degradation of MHC class I)	Fc-binding protein	vMIA	
γ -herpesvirus	IL-10; IL-6; INF regulatory factor (ICSBP)	Chemokine; Chemokine-R		KSHV/K3,K5 (induce endocytosis of MHC class I)		Bcl-2; FLIP	CCP (complement control protein); LMP-1; LMP-2A
Asfarvirus						C-type lectin; IAP; Bcl-	ІкВ (Inhibotor of NFкВ)
Baculovirus Iridovirus						Inhibitor of apoptosis Caspase-1	,
Mimivirus						EI24	

For those highlighted by red, our analyses identified several genes in the 67 LDV genomes as cA genes. For EI24 (in blue), see text.