

Table S2. NCLDV core genes identified in Marseillevirus

NCLDV core gene (8, 9)	Homolog ORF in Marseillevirus genome
<u>DNA replication</u>	
Family B DNA polymerase	ORF329
D5R like helicase	ORF152
AEP-type primase	ORF152
PCNA	ORF212
SWI/SNF2 ATPase	ORF203, ORF241
RuvC like Holliday junction resolvase	ORF216
ATP dependent DNA ligase	ORF72
NAD dependent DNA ligase?	-
Topoisomerase II	ORF173
<u>DNA precursor synthesis</u>	
dUTPase	-
Ribonucleotide reductase large subunit	ORF211
Ribonucleotide reductase small subunit	ORF268
Thymidine kinase	-
Thymidylate kinase	-
Thymidylate synthase	ORF429
<u>Transcription and RNA processing</u>	
RNA polymerase large subunit	ORF55_ORF52
RNA polymerase subunit 2	ORF23
RNA polymerase subunit 10	-
RNA polymerase subunit 5	ORF383
A1L transcription factor/late transcription factor VLTF-2	ORF237
TFIIS-like zinc ribbon	ORF222
A2L like transcription factor	ORF340
A7L like transcription factor	ORF306
Bro-N domain	-
KilA-N domain	-
D6R/D11L like helicase	ORF203, ORF241
A18R like helicase	ORF270
I8 like helicase	-
Capping enzyme	ORF314
G5R like FLAP endonuclease	ORF365
E1L like polyA polymerase	-
Nudix hydrolase	ORF242, ORF277
<u>Virion packaging and morphogenesis</u>	
A32-like packaging ATPase	ORF157
Thiol oxidoreductase (E10R thiol reductase)	ORF310
Thioredoxin fold protein	ORF231, ORF313, ORF332
F10-like protein kinase	-
H1L like phosphatase	-
Capsid protein	ORF342
L1 like myristoylated virion protein	-
J5L-like virion membrane protein	-
SMT4-like thiol peptidase	-
A3L/P4B-like protein?	-
G1L like metalloprotease?	-
<u>Host-virus interactions</u>	
Ankyrin repeats (<i>not necessarily of NCLDV origin</i>)	ORF331, ORF445, ORF316, ORF330