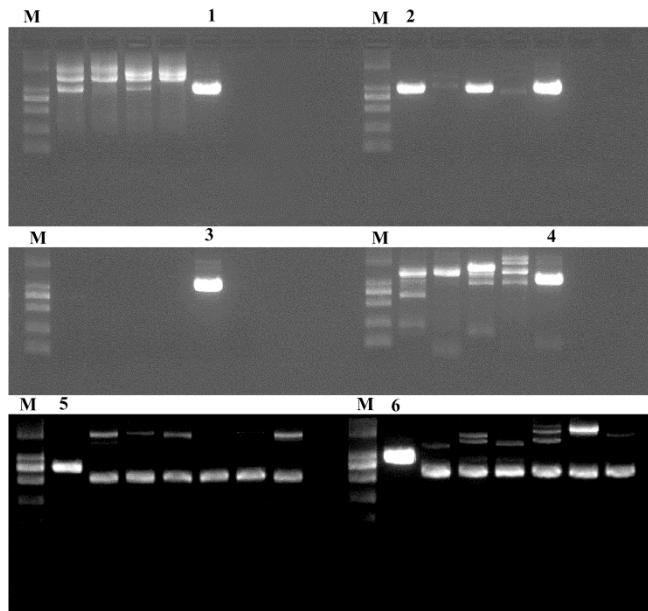
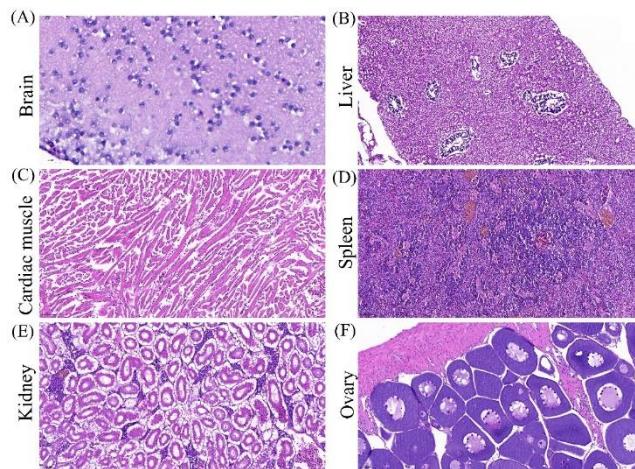


### Supplementary Figure 1



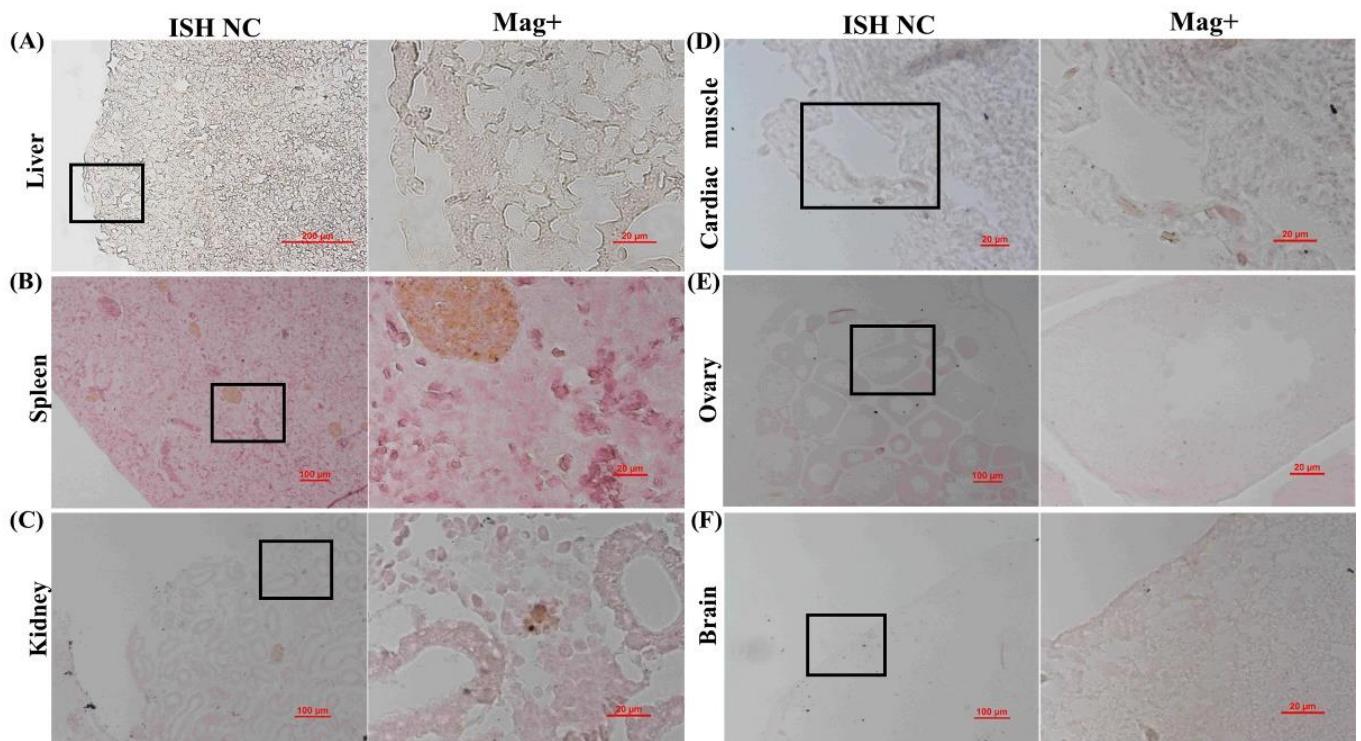
**Supplementary Figure 1** Agarose gel electrophoresis of all RT-PCR products for re-cloning of the CMNV isolated from *Larimichthys polyactis*. Lane M: 2000 bp marker; lanes 1-4: amplicons of RNA1 strand; lanes 5 and 6: amplicons of RNA2 strand.

### Supplementary Figure 2



**Supplementary Figure 2** Micrographs of HE for brain, cardiac muscle, kidney, spleen, liver and ovary of CMNV-free *L. polyactis*. Scale bars = (A) 20  $\mu\text{m}$ , (B) 100  $\mu\text{m}$ , (C) 50  $\mu\text{m}$ , (D) 50  $\mu\text{m}$ , (E) 50  $\mu\text{m}$ , (F) 50  $\mu\text{m}$ .

### Supplementary Figure 3



**Supplementary Figure 3** Micrographs of ISH for liver, spleen, kidney, cardiac muscle, ovary and brain of CMNV-infected *L. polyactis* without the CMNV RNA probe. The right figures were magnified micrograph of the zone in the black frame from left figures. Scale bars = 200  $\mu\text{m}$  and 20  $\mu\text{m}$ , 100  $\mu\text{m}$  and 20  $\mu\text{m}$ , 100  $\mu\text{m}$  and 20  $\mu\text{m}$ , 20  $\mu\text{m}$  and 20  $\mu\text{m}$ , 100  $\mu\text{m}$  and 20  $\mu\text{m}$ , 100  $\mu\text{m}$  and 20  $\mu\text{m}$  for low and high magnifications in (A), (B), (C), (D), (E) and (F), respectively.

**Supplementary table 1** Names and abbreviations for viral species of *Nodaviridae*.

Virus	Abbreviation	RdRp	Capsid protein
		GenBank no.	GenBank no.
<b><i>Alphanodavirus</i></b>			
Covert mortality nodavirus	CMNV-LP	MW625911	MW625912
Covert mortality nodavirus	CMNV-PV	MT270123	MT270124
Flock House virus	FHV	NP_689444	NP_689442
Black beetle virus	BBV	YP_053043	NP_049329
<i>Macrobrachium rosenbergii</i> nodavirus_China strain	MrNV China	AAQ54758	ACY26145
<i>Macrobrachium rosenbergii</i> nodavirus_Australia strain	MrNV Australia	AEY63648	AEY63650
<i>Macrobrachium rosenbergii</i> nodavirus_Malaysia strain	MrNV Malaysia	AEQ39078	AHM92901
<i>Penaeus vannamei</i> nodavirus	PvNV	YP_004207810	YP_004207809
<i>Drosophila melanogaster</i> American nodavirus	DmANV	ACU32794	ACU32796
Nodamura virus	NoV	NP_077730	AAF97862
Boolarra virus	BoV	NP_689439	P12869
Pariacoto virus	PaV	NP_620109	NP_620111
<b><i>Betanodavirus</i></b>			
Striped jack nervous necrosis virus	SJNNV	NP_599247	AET07080
Tiger puffer nervous necrosis virus	TPNNV	YP_003288759	YP_003288761
Atlantic halibut nodavirus	AHNV	AAY34458	AOG18247
Golden pompano nervous necrosis virus	GPNNV	ACX54065	AEK48132
Atlantic cod nodavirus	ACNV	ABR23192	ABR23183
Japanese flounder nervous necrosis virus	JFNNV	ACN58225	BAB00609
Dragon grouper nervous necrosis virus	DGNNV	AAU85148	AAG22496
Barfin flounder nervous necrosis virus	BFNNV	YP_003288756	YP_003288758
Red spotted grouper nervous necrosis virus	RGNNV	ACX69744	AIK23438