

## *Supplementary Material*

1 **Table S1.** Primers used in real-time PCR.

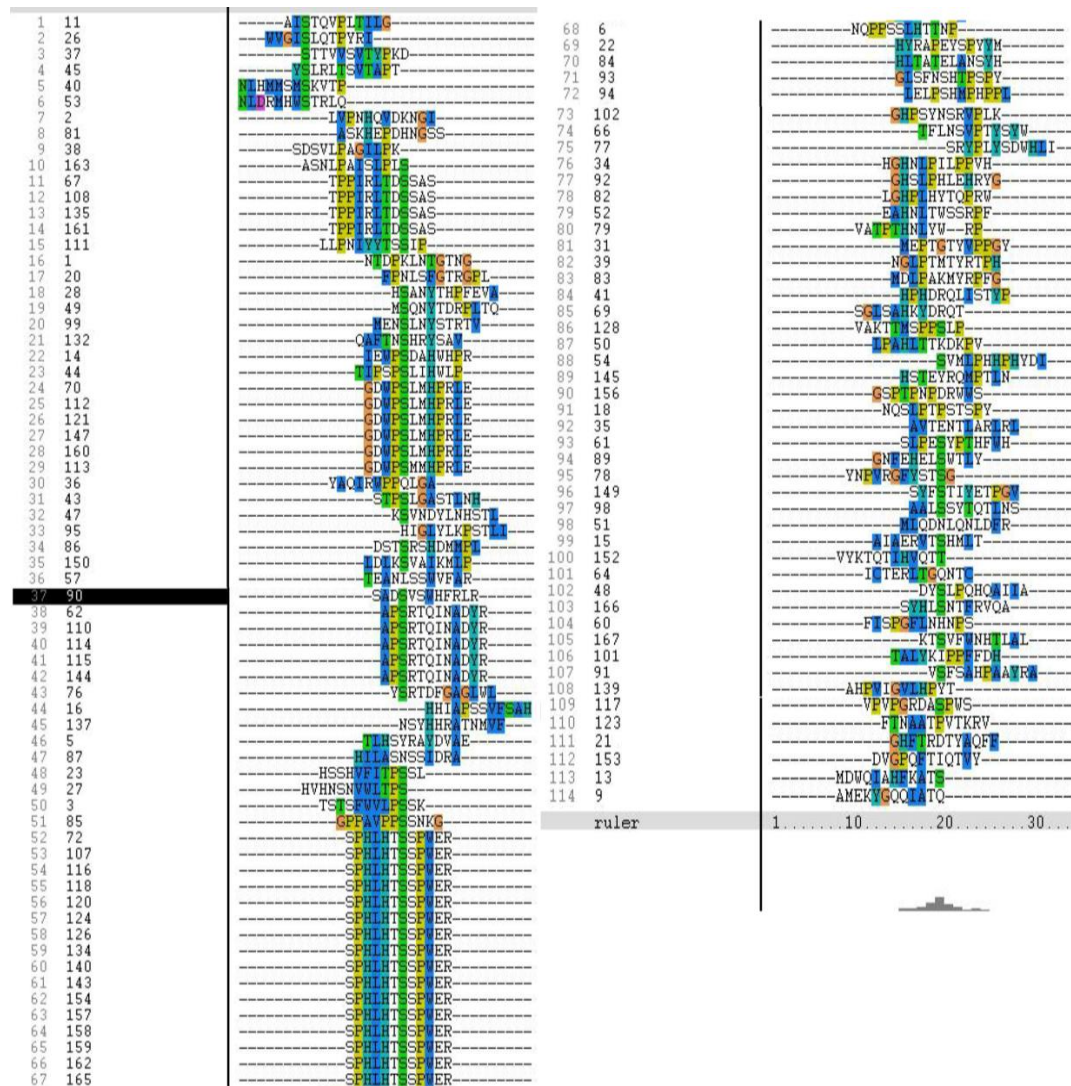
Primer	Sequence (5'–3')	GenBank ID
	F: TGCTGTGTTCCCATCTATCG	
β-actin	R: TTGGTGACAATACCGTGTTCA	NM_205518.1
	F: AGCCCAAGGTAAGGGTCTCG	
MHC II	R: CGCCCGCTCAGGAACCACT	NM001001762.1
	F: AACAGAAATGGTGGTAAGAT	
CD80	R: TAGAAGCAAACCTGGTGA	NM_001079739.1
	F: TGTGAAGACTGGGTAATAGG	
CD83	R: AGGACAACAGCAGGAAGC	XM_418929
	F: TTGCTACTTCCCAAACCTC	
CD86	R: TCATCCACAATCCCTACA	EF554724.1
	F: GCCCTCCTCCAGCCAGAAAG	
IL-1β	R: TAGCCCTTGATGCCCAGTGC	NM_204524.1
	F: TTCACCATCAGGCACGAC	
DEC205	R: AAGGCGACTCTGGGACAC	NM_001037836
	F: GCAGGACGAGATGTGCAA	
IL-6	R: CCAGGTAGGTCTGAAAGGC	AJ309540
	F: R ACCTCTTCAAGGGTGCACTCA	
IL-12	R: ACCTCTTCAAGGGTGCACTCA	AY262751
	F: ATCATACTGAGCCAGATTGTTTCG	
IFN-γ	R: TCTTTCACCTTCTTCACGCCAT	Y07922
	F: GAAGCAGCGTTTGGGAGT	
TNF-α	R: GTTGTGGGACAGGGTAGG	NM_204267.1
	F: TGGCTCTTCTCCTGATCTCAATG	
CXCL1	R: GCACTGGCATCGGAGTTCA	Y14971

3 **Table S2.** Sequences and frequency of peptides

Name	Sequence	Frequency
SP	SPHLHTSSPWER	16/114 (14.0%)
GD	GDWPSLMHPRLE	5/11 (4.4%)
AP	APSRTQINADYR	5/114 (4.4%)
TP	TPPIRLTDSSAS	4/114 (3.5%)

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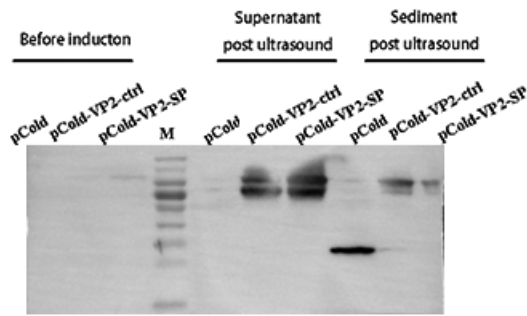
5



**Supplementary Figure 1.** Sequences of 12-mer peptides. After the fourth round of biopanning, individual phage-plaques were randomly selected and amplified separately. The nucleotide sequence of each phage was translated to its corresponding peptide sequence.

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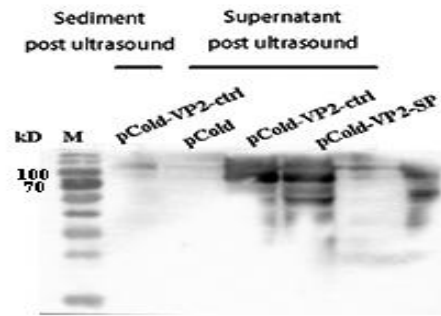
A



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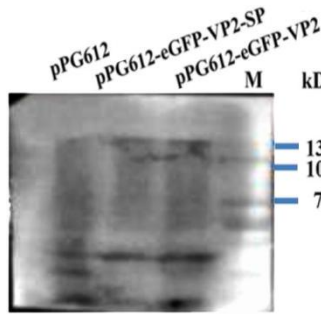
15

B



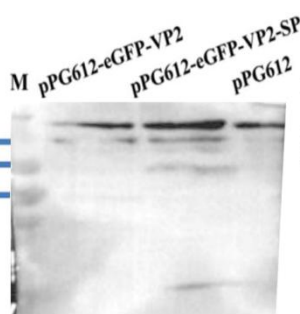
16

C

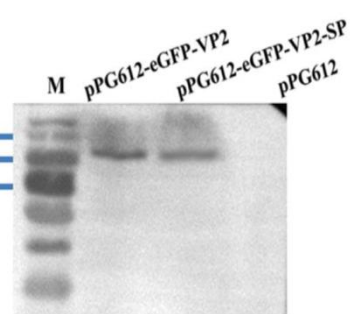


17

D



E



18 **Supplementary Figure 2.** Western blot. Identification of recombinant VP2 protein  
19 expressed in BL21 by western blot (A and B). Anti-His monoclonal antibody was  
20 used as the primary antibody (A). IBDV VP2 monoclonal antibody was used as the  
21 primary antibody (B). Identification of recombinant VP2 protein expressed in *L. sae*  
22 M-11 through western blotting (C, D and E). Anchor polyclonal antibody was used as  
23 the primary antibody (C). Anti-eGFP monoclonal antibody was used as the primary  
24 antibody (D). Anti-IBDV VP2 monoclonal antibody was used as the primary antibody  
25 (E).

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