



Supplementary Information



Figure S1. Distribution of 27.8R in (**A**,**A**') brain; (**B**,**B**') spleen; (**C**,**C**') heart; (**D**,**D**') head kidney and (**E**,**E**')kidney detected by IIFA.The green fluorescence (white arrow) indicated positive signals of 27.8R. Scale bar: 50 μm.



Figure S2. Distribution of 27.8R in (**A**,**A**') brain; (**B**,**B**') spleen; (**C**,**C**') heart; (**D**,**D**') head kidney and (**E**,**E**') kidney detected by IHC. Black arrows indicated the distribution of 27.8R. Scale bar: 50 μ m.



Figure S3. IIFA detection of the (**A**) 27.8-kDa receptor and (**B**) LCDV particles in turbot red blood cells post-LCDV infection, and no green fluorescence was observed. Cells were non-specificly stained in red by EBD. Scale bar: $10 \,\mu$ m.



Figure S4. IIFA results of negative control using anti-WSSV MAbs as primary antibody in turbot whole blood cells post-LCDV infection, showing no green fluorescence in the cells. Cell nuclei were counterstained in blue by DAPI. Scale bar: $10 \,\mu$ m.