



**Supplementary Figure S4 Immunohistochemical staining for influenza virus antigen in tissues of chickens (A-D) and ducks (E-H) infected with the HPAI A(H5N8) virus.** In chicken tissues, antigen-positive cells were detected alveolar macrophages (**A**, arrowheads) and mainly in neurons in cerebrum (**B**, arrow), nucleus of myocytes in heart (**C**, white arrows), and mononuclear phagocytic cells in intestine (**D**). In ducks, immunopositive cells were found in mononuclear phagocytic cells in the lung, (**E**, arrows), heart (**G**, arrows), and intestine (**H**) but lacking in the brain (**F**). Scale bars = 50  $\mu$ m.