TABLE S1. AEC media components and concentrations

Media	Components	Source	Concentration
AEC basic	DMEM/F-12	Invitrogen Co., Ltd. (Carlsbad, CA)	
	$NaHCO_3$	Nakarai Pharmaceutical Co., Ltd.	1.2 mg/ml
	HEPES	Invitrogen Co., Ltd.	3.6 mg/ml
	Penicillin	Nakarai Pharmaceutical Co., Ltd.	100 U/ml
	Streptomycin	Nakarai Pharmaceutical Co., Ltd.	100 μg/ml
	Glutamine	Invitrogen Co., Ltd.	2 mM
	Amphotericin B	Sigma-Aldrich	250 ng/ml
AEC plus	AEC basic		
	Insulin	Sigma-Aldrich	10 μg /ml
	Transferrin	Invitrogen Co., Ltd.	5 μg /ml
	Cholera toxin	Calbiochem Co., Ltd	0.1 μg /ml
	Epidermal growth factor	Invitrogen Co., Ltd.	25 ng/ml
	Bovine pituitary extract	Biomedical Technologies Inc. (Stoughton, MA)	30 μg/ml
	Fetal bovine serum	Equitech-Bio Co., Ltd (Kerrville, TX)	5% (v/v)
	Retinoic acid	Wako Chemical Co., Ltd. (Osaka, Japan)	0.05 μM
	D-Valine	Tokyo Chemical Industry Co., Ltd. (Tokyo, Japan)	0.1 mg/ml

Figure Legend for Supplemental Figures

FIG. S1. Validation of pAEpC isolation from porcine lung by the detection of an epithelial cell marker.

Immunostaining of cytokeratin 19 as an epithelial cell marker and vimentin as a fibroblast marker (negative control) in pAEpC and porcine alveolar fibroblasts. The cells were prepared at the same time. Scale bars, 100 μm.

FIG. S2. Caspase 3 activity in human lung carcinoma cell line A549 at 16 hpi with avian influenza virus.

A549 cells were infected with H5N1, H5N2, or H5N3 at an MOI of 1. Caspase 3 activity (left panel) and cell morphology (right upper panel) at 16 hpi are shown. Virus antigen was detected by western blot analysis (right lower panel). Scale bar, 100 μm.

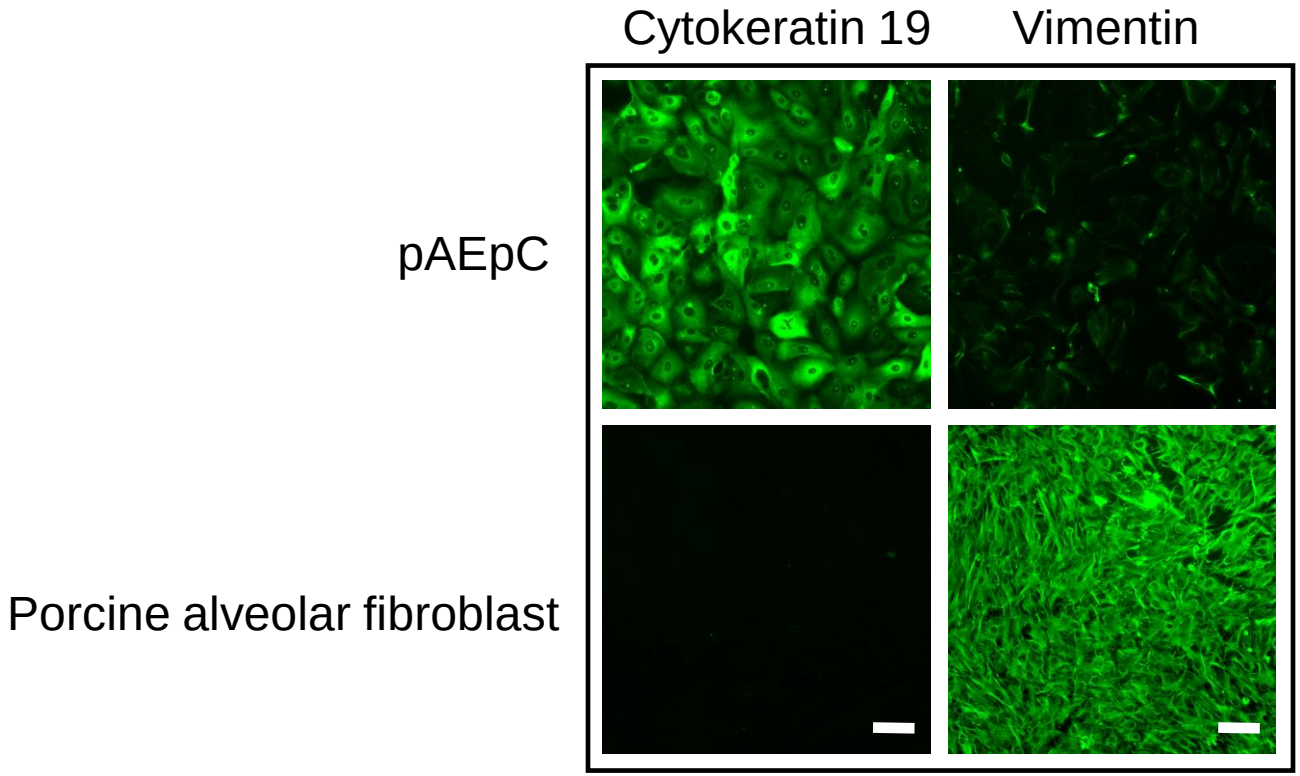
Cytokeratin 19
Vimentin
pAEpC
Porcine alveolar fibroblast

FIG. S1.

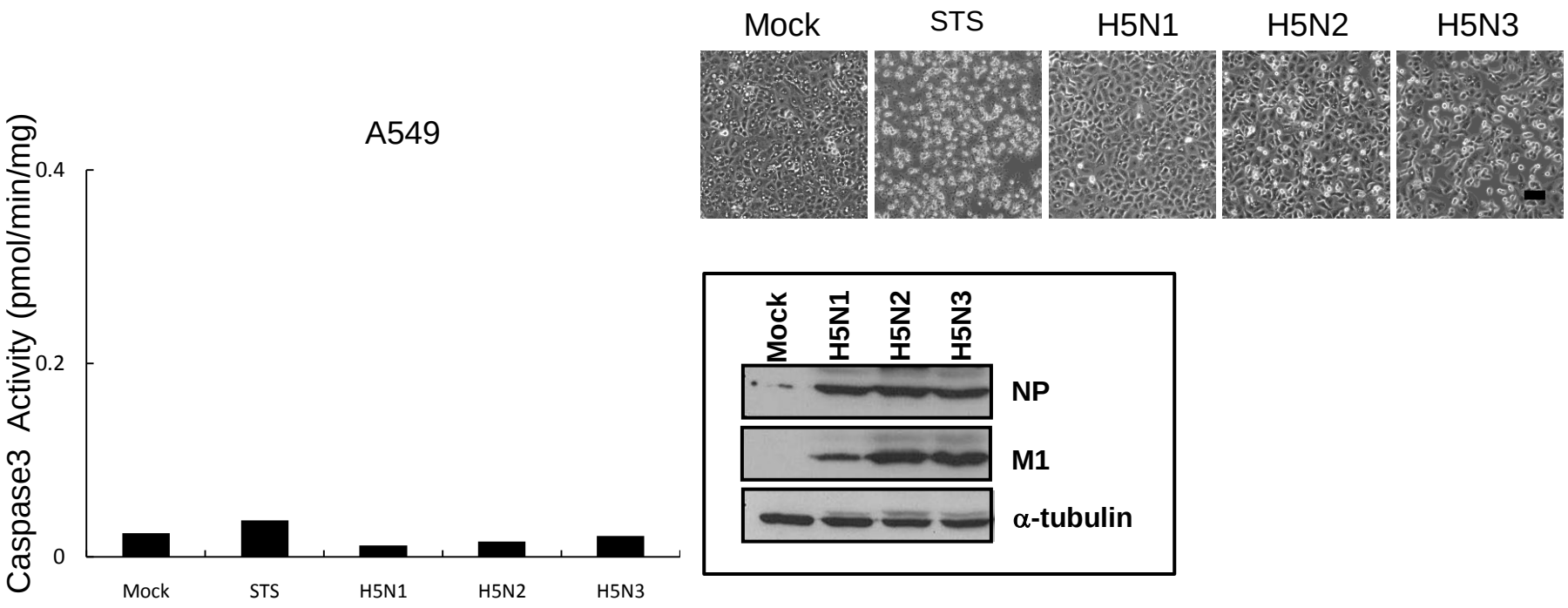
Mock
STS
H5N1
H5N2
H5N3
A549
Caspase3 Activity (pmol/min/mg)
0.4
0.2
0
Mock
STS
H5N1
H5N2
H5N3
Mock
H5N1
H5N2
H5N3
NP
M1
α-tubulin

FIG. S2.