

Materials List for:

Fluorescence-based Neuraminidase Inhibition Assay to Assess the Susceptibility of Influenza Viruses to The Neuraminidase Inhibitor Class of Antivirals

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Materials

Name	Company	Catalog Number	Comments
Influenza A and B viruses		Cultured in MDCK cells or 9 day old embryonated specific pathogen free (SPF) eggs	
Madin-Darby Canine Kidney (MDCK) cells	ATCC	PTA-6500	
2-(4-methylumbelliferyl)-a-D-N-acetylneuraminic acid (MUNANA)	Biosynth AG	M-5507	
2-(4-methylumbelliferyl)-a-D-N-acetylneuraminic acid (MUNANA)	Sigma	M8639	
4-Methylumbelliferone (4-MU)	Sigma	M1381-25G	
2-[N-morpholino]ethanesulphonic acid (MES hydrate) (free acid)	Sigma	M8250-250G	
Calcium Chloride (Ca Cl ₂)	APS AJAX Finechem	127-500G	
Surfactant-Amps-NP-40 (10% solution)	Thermo Fisher Scientific	PIE28324	
Sodium Hydroxide (NaOH)	APS AJAX Finechem	482-2.5KG	
Absolute Ethanol	APS AJAX Finechem	214-2.5L GL	
96-well clear flat-bottom plates	NUNC	456537	
96-well U-bottom plates	Greiner Bio-one	4650101	
8 channel deep well block	Pacific Laboratory Products	RES-MW8-HP	
96-well deep plates, 2.0 mL square wells	Pacific Laboratory Products	P-2ML-SQ-C	
Plate sealers	Thermo Fisher Scientific	236366	
Bottle-top vacuum filter system (cellulose membrane (nitrate), pore size 0.2 µm, membrane area 33.2 cm ² , filter capacity 500 mL)	Sigma-Aldrich	CLS430758-12EA	
Single-channel pipettes (1 µL - 1,000 µL)	Variety of suppliers (eg. Eppendorf, Sartorius)		
Multi-channel pipettes	Variety of suppliers (eg. Eppendorf, Sartorius)	8 or 12 channel electronic and manual pipette (5 - 1250 µL volume)	
Pipette tips (1 µL - 1,250 µL)	Variety of suppliers (eg. Eppendorf, Sartorius)		
Disposable pipettes (10 mL and 25 mL)	Greiner Bio-one	P7740-200EA and P7865-200EA	
Pipette controller	Eppendorf	4430000018	
Centrifuge tubes 50 mL	BD Bioscience	352070	

Racked tubes	Scientific Specialties, Inc.	1750-00	
Fluorometer with excitation wavelength setting of 355 nm and an emission wavelength setting of 460 nm	TermoFisher Scientific	ASCENT FL 374	
Ascent software	TermoFisher Scientific	5185410CD	
Incubator set at 37 °C	Lab Supply	Biocell 1000	
Zanamivir	GlaxoSmithKline	Request directly from the company	
Oseltamivir carboxylate	Roche		
Peramivir (BCX-1812)	BioCryst		
Laninamivir (R-125489)	Daiichi-Sankyo		
JASPR v1.2	Influenza Division at the CDC Atlanta, USA	freely available upon request (fluantiviral@cdc.gov)	