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Product Description: Reference Standard 1

Catalog Number: C00ADK-2

Lot Number: A00V0004

Expiration Date: 30 JUN 2025

Storage Temperature: ≤ -70 °C

For Use:

IgG: Use at 1:10 for all plate types

IgM: Use as vialled for all plate types

IgA: Use at 1:10 for Respiratory Plate 1; use as vialled for all other plate types

Concentration Assignment:

Values are provided in two units –

MSD Arbitrary Units/mL (AU/mL) and WHO Biological Arbitrary Units/mL (BAU/mL) (NIBSC 20/136)

Assay	Conc. of IgG (vialled)	Conc. of IgG (1:10)	Unit of Measure	WHO Conc. of IgG (vialled)	WHO Conc. of IgG (1:10)	WHO Unit of Measure
SARS-CoV-2 Spike	700	70.0	AU/mL	6.31	0.631	BAU/mL
HCoV-NL63 Spike	50	5.0	AU/mL			
SARS-CoV-2 Nucleocapsid	800	80.0	AU/mL	1.89	0.189	BAU/mL
SARS-CoV-1 Spike	50	5.0	AU/mL			
SARS-CoV-2 S1 NTD	10	1.0	AU/mL			
HCoV-HKU1 Spike	300	30.0	AU/mL			
HCoV-OC43 Spike	500	50.0	AU/mL			
HCoV-229E Spike	300	30.0	AU/mL			
SARS-CoV-2 S1 RBD	300	30.0	AU/mL	8.16	0.816	BAU/mL
MERS-CoV Spike	50	5.0	AU/mL			
Flu B/Brisbane HA	1000	100	AU/mL			
Flu A/Shanghai H7	200	20.0	AU/mL			
Flu A/Michigan H1	1000	100	AU/mL			
RSV Pre-Fusion F	1000	100	AU/mL			
Flu A/HongKong H3	1000	100	AU/mL			
Flu B/Phuket HA	1000	100	AU/mL			
SARS-CoV-2 Spike (D614G)	720	72.0	AU/mL			
SARS-CoV-2 Spike (B.1.1.7)	470	47.0	AU/mL			
SARS-CoV-2 Spike (B.1.351)	210	21.0	AU/mL			
SARS-CoV-2 Spike (P.1)	360	36.0	AU/mL			
SARS-CoV-2 S1 RBD (B.1.1.7)	200	20.0	AU/mL			
SARS-CoV-2 S1 RBD (B.1.351)	63.0	6.30	AU/mL			
SARS-CoV-2 S1 RBD (P.1)	100	10.0	AU/mL			



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Assay	Conc. of IgM (vial)	Unit of Measure	WHO Conc. of IgM (vial)	WHO Unit of Measure
SARS-CoV-2 Spike	40.0	AU/mL	0.867	BAU/mL
HCoV-NL63 Spike	0.2	AU/mL		
SARS-CoV-2 Nucleocapsid	20.0	AU/mL	2.64	BAU/mL
SARS-CoV-1 Spike	2.0	AU/mL		
SARS-CoV-2 S1 NTD	2.0	AU/mL		
HCoV-HKU1 Spike	1.0	AU/mL		
HCoV-OC43 Spike	1.0	AU/mL		
HCoV-229E Spike	1.0	AU/mL		
SARS-CoV-2 S1 RBD	20.0	AU/mL	0.466	BAU/mL
MERS-CoV Spike	4.0	AU/mL		
Flu B/Brisbane HA	60.0	AU/mL		
Flu A/Shanghai H7	1.0	AU/mL		
Flu A/Michigan H1	10.0	AU/mL		
RSV Pre-Fusion F	5.0	AU/mL		
Flu A/HongKong H3	1.0	AU/mL		
Flu B/Phuket HA	80.0	AU/mL		

Assay	Conc. of IgA (vial)	Conc. of IgA (1:10)	Unit of Measure	WHO Conc. of IgA (vial)	WHO Unit of Measure
SARS-CoV-2 Spike	50.0	5.0	AU/mL	3.10	BAU/mL
HCoV-NL63 Spike	10.0	1.0	AU/mL		
SARS-CoV-2 Nucleocapsid	50.0	5.0	AU/mL	5.57	BAU/mL
SARS-CoV-1 Spike	10.0	1.0	AU/mL		
SARS-CoV-2 S1 NTD	20.0	2.0	AU/mL		
HCoV-HKU1 Spike	130	13.0	AU/mL		
HCoV-OC43 Spike	220	22.0	AU/mL		
HCoV-229E Spike	40.0	4.0	AU/mL		
SARS-CoV-2 S1 RBD	20.0	2.0	AU/mL	1.56	BAU/mL
MERS-CoV Spike	10.0	1.0	AU/mL		
Flu B/Brisbane HA	1200	120	AU/mL		
Flu A/Shanghai H7	10.0	1.0	AU/mL		
Flu A/Michigan H1	300	30.0	AU/mL		
RSV Pre-Fusion F	500	50.0	AU/mL		
Flu A/HongKong H3	200	20.0	AU/mL		
Flu B/Phuket HA	700	70.0	AU/mL		



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This product was manufactured and tested according to MSD documents. This lot meets MSD's specifications. This product is intended for Research Use Only. Not for use in Diagnostic Procedures.

	Name	Function	Signature	Date
Review/Approval	Karen Hamilla	Quality	<i>Karen Hamilla</i>	23 MAR 2021