



EXTENSION MEMO

Page 1 of 1

Product Description(s): Reference Standard 1

Catalog Number(s) / Size(s): C00ADK-2

Lot Number: A0080286

Based on additional testing, the original date of expiration for this Reference Standard has been extended by 60 months. The expiration date of A0080286 has been extended to 28 FEB 2031.

Function	Name	Signature	Date
Quality	Karen Hamilla		06 MAY 2024

This memo supersedes all other statements regarding date of expiration for this product.



RFE MEMO

Page 1 of 1

Product Description(s): Serology Control Pack 1

Catalog Number(s) / Size(s): C4381-1

Lot Number: A00C0825, A00C0826, A00C0827

Based on additional testing, the original date of expiration for this Control Pack has been extended by 60 months. The expiration date of A00C0825, A00C0826, A00C0827 has been extended to 31 MAR 2032

The expiration dates for the following controls have been extended:

Description	Lot Number	Original Expiration Date	New Expiration Date
Serology Control 1.1	A00C0825	31 MAR 2027	31 MAR 2032
Serology Control 1.2	A00C0826	31 MAR 2027	31 MAR 2032
Serology Control 1.3	A00C0827	31 MAR 2027	31 MAR 2032

Function	Name	Signature	Date
Quality	Karen Hamilla		03 MAY 2024

This memo supersedes all other statements regarding date of expiration for this product.



CERTIFICATE OF ANALYSIS

Page 1 of 2

Product Description: V-PLEX® SARS-CoV-2 Key Variant Spike Panel 1 Kit
Lot Number: K0082941
Expiration Date: 31 AUG 2027
Catalog Numbers: K15651U-Series; K15652U-Series; K15653U-Series; K15654U-Series;
 K15655U-Series; K15656U-Series; K15657U-Series

Kit Components:

The kit expiration date provided in the COA is determined by the component with the earliest expiration date. As the kit is supplied with different catalog products, not all configurations include all the components. In such cases, the applicable expiration date is determined by the shortest expiry among the components included in the kit that is received.

Description	Lot Number	Storage Temperature	Expiration Date
SARS-CoV-2 Key Variant Spike Plate 1	Z0057691	2-8°C	31 OCT 2028
SULFO-TAG™ Anti-Human IgG Antibody	D00V0038	2-8°C	31 AUG 2027
Reference Standard 1	A0080286	≤ -70°C	28 FEB 2031
Serology Control 1.1	A00C0825	≤ -70°C	31 MAR 2032
Serology Control 1.2	A00C0826	≤ -70°C	31 MAR 2032
Serology Control 1.3	A00C0827	≤ -70°C	31 MAR 2032
ACE2 Calibration Reagent	Not Kit Specific	2-8°C	See Label
SULFO-TAG™ Human ACE2 Protein	Not Kit Specific	2-8°C	See Label
SULFO-TAG™ Anti-Human IgM Antibody	Not Kit Specific	2-8°C	See Label
SULFO-TAG™ Anti-Human IgA Antibody	Not Kit Specific	2-8°C	See Label
SULFO-TAG™ Anti-Mouse IgG Antibody	Not Kit Specific	2-8°C	See Label
SULFO-TAG™ Anti-Mouse IgM Antibody	Not Kit Specific	2-8°C	See Label
SULFO-TAG™ Anti-Mouse IgA Antibody	Not Kit Specific	2-8°C	See Label
Diluent 100	Not Kit Specific	2-8°C	See Label
MSD Blocker A Kit	Not Kit Specific	Room Temperature	See Label
MSD GOLD Read Buffer B	Not Kit Specific	Room Temperature	See Label

Plate Uniformity Testing Results:

Parameter	Precision			Uniformity	Signal
Metric	CV of Intra-plate Averages	Average Intra-plate CV	Max Intra-plate CV	Average Uniformity Metric	Average Signal
SARS-CoV-2 Spike	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Spike (BA.2.12.1)	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Nucleocapsid	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Spike (BA.2.75)	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Spike (BA.2)	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Spike (B.1.1.529; BA.1)	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Spike (B.1.617.2; AY.4) Alt Seq 2	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Spike (B.1.1.7)	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Spike (B.1.351)	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000
SARS-CoV-2 Spike (BA.5)	≤ 18%	≤ 10%	≤ 13%	Pass	1,500 – 1,000,000



CERTIFICATE OF ANALYSIS

Page 2 of 2

Coating Confirmation Testing Results:

Spot	Description	Result
1	SARS-CoV-2 Spike	Pass
2	SARS-CoV-2 Spike (BA.2.12.1)	Pass
3	SARS-CoV-2 Nucleocapsid	Pass
4	SARS-CoV-2 Spike (BA.2.75)	Pass
5	SARS-CoV-2 Spike (BA.2)	Pass
6	SARS-CoV-2 Spike (B.1.1.529; BA.1)	Pass
7	SARS-CoV-2 Spike (B.1.617.2; AY.4) Alt Seq 2	Pass
8	SARS-CoV-2 Spike (B.1.1.7)	Pass
9	SARS-CoV-2 Spike (B.1.351)	Pass
10	SARS-CoV-2 Spike (BA.5)	Pass

Note: Alternative S-GENE mutations for Spike of AY.1, AY.2, and B.1.617.2 are listed as "Alt Seq#."

Functional Testing Results:

Sample Type	Calibrator	Controls		Samples	
Metric	Avg Signal Ratio Test:Reference	Control Recovery	Control Conc. CV	Avg % Difference Test:Reference	Slope Test:Reference
SARS-CoV-2 Spike	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Spike (BA.2.12.1)	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Nucleocapsid	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Spike (BA.2.75)	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Spike (BA.2)	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Spike (B.1.1.529; BA.1)	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Spike (B.1.617.2; AY.4) Alt Seq 2	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Spike (B.1.1.7)	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Spike (B.1.351)	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2
SARS-CoV-2 Spike (BA.5)	50 – 200%	70 – 130%	< 20%	± 25%	0.80 – 1.2

Additional Comments:

Functional testing was executed using SARS-CoV-2 Key Variant Spike Plate 1 (Z0057691), SULFO-TAG Anti-Human IgG Antibody (D00V0038), Reference Standard 1 (A0080286), and Serology Controls (A00C0825, A00C0826, A00C0827).

All kit components were manufactured and tested according to MSD documents. The lots listed in the Kit Components table meet MSD's specifications.

Statement:

The above product is intended for Research Use Only. Not for use in Diagnostic Procedures.

	Name	Function	Signature	Date
Review/Approval	Karen Hamilla	Quality		23 JUL 2026