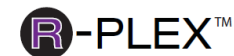


R-PLEX™ Assay Diluent Volume Calculation



The table below provides a dilution scheme for sample dilution and assay diluent volumes based on recommended sample dilution factors. For the assay(s) being tested, find your sample dilution factor (first column); then reading across the row, select:

- (1) 40 samples run in duplicate or 80 samples run in singlicate (per plate)
- (2) Sample Dilutions only or Complete Assay (includes volumes for blocking, calibrator, and sample dilutions)
- (3) 1 plate or 5 plates

Sample Dilution Factor	Dilution 1		Dilution 2		Dilution 3		Total volume: For 40 samples run in duplicate				Total volume: For 80 samples run in singlicate			
	Sample (μL)	Diluent (μL)	Sample (μL)	Diluent (μL)	Sample (μL)	Diluent (μL)	Sample Dilutions only		Complete Assay		Sample Dilutions only		Complete Assay	
							1 plate	5 plates	1 plate	5 plates	1 plate	5 plates	1 plate	5 plates
Required Assay Diluent Volumes (mL)							Required Assay Diluent Volumes (mL)							
0 (neat)		0					1	5	6	30	2	10	7	35
2	50	50					3	15	8	40	6	30	11	55
4	25	75					4	20	9	45	8	40	13	65
5	20	80					4	20	9	45	8	40	13	65
8	10	70					4	20	9	45	8	40	13	65
10	10	90					5	25	10	50	10	50	15	75
16	10	150					8	40	13	65	16	80	21	105
20	10	190					10	50	15	75	20	100	25	125
25	10	240					12	60	17	85	24	120	29	145
50	10	490					25	125	30	150	50	250	55	275
100	10	990					50	250	55	275	100	500	105	525
200	10	990	50	50			52	260	57	285	104	520	109	545
400	10	990	25	75			54	270	59	295	108	540	113	565
1,000	10	90	10	990			54	270	59	295	108	540	113	565
4,000	10	390	10	990			69	345	74	370	138	690	143	715
5,000	10	490	10	990			74	370	79	395	148	740	153	765
8,000	10	70	10	990	10	90	58	290	63	315	116	580	121	605
12,000	10	110	10	990	10	90	60	300	65	325	120	600	125	625
300,000	10	990	10	990	10	290	114	570	119	595	228	1,140	233	1,165

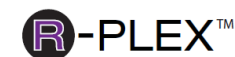
For example: If you are diluting your samples 10-fold and are running 40 samples per plate in duplicate:

- (1) For Sample Dilutions only, you will need 5 mL of assay diluent (1 plate) or 25 mL of assay diluent (5 plates)
- (2) For the Complete Assay, including volumes for blocking, calibrators, and sample dilutions, you will need 10 mL of assay diluent (1 plate) or 50 mL of assay diluent (5 plates)

Note: For other plate quantities, please scale up diluent volumes from the amounts provided in the table for 1 and 5 plate sizes.



R-PLEX Assay and Antibody Diluents



Once the required total assay diluent volume is calculated, please choose the appropriate diluent size and quantity for purchase.

R-PLEX assays may have specific diluents for sample and calibrator dilution, as well as for preparation of the detection antibody solution. The catalog numbers for diluents commonly used in R-PLEX assays are provided below, but a range of diluents is available for purchase at www.mesoscale.com.

Name	Catalog No.	Size
Diluent 1	R50CK-4	50 mL
	R50CK-2	150 mL
Diluent 2	R51BB-4	8 mL
	R51BB-3	40 mL
	R51BB-2	200 mL
Diluent 3	R50AP-1	8 mL
	R50AP-2	40 mL
Diluent 5	R52BA-5	25 mL
	R52BA-6	125 mL
Diluent 6	R53BB-4	8 mL
	R53BB-3	40 mL
Diluent 7	R54BB-4	5 mL
	R54BB-3	50 mL
Diluent 8	R54BA-4	5 mL
	R54BA-3	50 mL
Diluent 10	R55BB-5	10 mL
	R55BB-3	50 mL
Diluent 11	R55BA-5	10 mL
	R55BA-3	50 mL
Diluent 12	R50JA-4	10 mL
	R50JA-3	50 mL
Diluent 13	R56BB-4	10 mL
	R56BB-3	50 mL
Diluent 17	R50KA-4	6 mL
	R50KA-3	30 mL
Diluent 22	R50BB-8	8 mL
	R50BB-4	40 mL

Name	Catalog No.	Size
Diluent 27	R500A-3	30 mL
	R500A-2	150 mL
Diluent 29	R50HA-4	15 mL
	R50HA-3	40 mL
Diluent 30	R50AB-4	25 mL
Diluent 35	R50AE-3	30 mL
	R50AE-2	150 mL
Diluent 37	R50AF-3	25 mL
	R50AF-6	125 mL
Diluent 39	R5ABB-2	50 mL
Diluent 40	R50AJ-1	5 mL
	R50AJ-2	40 mL
Diluent 41	R50AH-1	10 mL
	R50AH-2	50 mL
Diluent 42	R50AK-1	10 mL
	R50AK-2	50 mL
Diluent 43	R50AG-1	10 mL
	R50AG-2	50 mL
Diluent 45	R50AI-3	8 mL
	R50AI-4	40 mL
Diluent 100	R50AA-4	50 mL
	R50AA-2	200 mL
	R50AA-3	1,000 mL
Diluent 101	R51AD-3	50 mL
	R51AD-7	700 mL

Diluent 100 may be used in place of assay diluent for samples that require high dilution. Testing of different diluents can help optimize assays for specific experimental conditions.

Please refer to individual R-PLEX datasheet(s) for information regarding the dilution factor used in testing specific R-PLEX Antibody Sets.

For further guidance on choosing diluents, please contact our Scientific Support team at 240-314-2798 or at scientificsupport@mesoscale.com.

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