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Australian Government
Department of Health
Therapeutic Goods Administration

Laboratories Branch

Biochemistry – Cell Culture Manual

Procedure	CC – 28 – Anti-D Activity – WORKSHEET
Written	s22
Authorised	s22
Date issued	Friday, 11 March 2016
Revision #	3

Anti-D Activity – WORKSHEET

Analyst: s22 Date: 17 JAN 2017

Sample Information

All standards, controls and samples should be measured in TRIPLICATE.

Standard: Name: 2nd 15 Anti-D
Ref#: 01/572
Conc: 285 IU/vial

Sample 1: Rhophylac LIMS# 1608003190 B# 4367600001 conc 1500 IU/2ml
Sample 2: Rh(D) IgG LIMS# " ... 3191 B# 3690850044 conc 250 IU/vial
Sample 3: " " LIMS# " ... 3192 B# 3680010064 conc 625 IU/vial
Sample 4: 2nd 15 Anti-D LIMS# F2 01JUN2016 B# 01/572 conc 285 IU/vial

Reagents

PBS-BSA Prepared on 11 JAN 2017 Expiry 18 JAN 2017
Secondary Antibody - Goat Anti-Human IgG – Alexa Fluor 488
Batch # 1786428A Expiry 21-08-2018

- Dilute 1:100 in PBS-BSA

Total Volume	Secondary Ab required	Volume Ab	Volume PBS-BSA
<u>3.6 ml</u>		<u>36 µl</u>	<u>3564 µl</u>

Red Blood cells Batch # 02421232 Expiry 14 FEB 2017
Abtectcell III, 3%

- Dilute 1:10, in PBS-BSA

	Total required	Red Blood Cells	PBS-BSA
<u>R1R1</u>	<u>4 mL</u>	<u>400 µl</u>	<u>3.6 ml</u>
<u>rr</u>	<u>400 µl</u>	<u>40 µl</u>	<u>360 µl</u>

Record Details	R14 1131475 CC - 28 - Anti-D Activity - WORKSHEET		
Last Editor	s22	Edit Date	11/03/2016 10:23 AM
Print Date	17/01/2017 8:27 AM		Page 1 of 3

Dilutions

For samples over 50 IU/ml, perform a pre dilution

Predilution Dilute standard/sample to a concentration of 7.5 IU/ml in PBS-BSA

Standard: 10 μ L of 285 IU/mL + 370 μ L of PBS-BSA = 7.5 IU/mL

Sample 1: 10 μ L of 600 IU/mL + 790 μ L of PBS-BSA = 7.5 IU/mL

Sample 2: 12 μ L of 200 IU/mL + 308 μ L of PBS-BSA = 7.5 IU/mL

Sample 3: 10 μ L of 525 IU/mL + 690 μ L of PBS-BSA = 7.5 IU/mL

Sample 4: 10 μ L of 285 IU/mL + 370 μ L of PBS-BSA = 7.5 IU/mL

Dilute standard/sample to a final concentration of 0.5 IU/mL in PBS-BSA

Standard: 16 μ L of 7.5 IU/mL + 224 μ L of PBS-BSA = 0.5 IU/mL

Sample 1: 16 μ L of 7.5 IU/mL + 224 μ L of PBS-BSA = 0.5 IU/mL

Sample 2: 16 μ L of 7.5 IU/mL + 224 μ L of PBS-BSA = 0.5 IU/mL

Sample 3: 16 μ L of 7.5 IU/mL + 224 μ L of PBS-BSA = 0.5 IU/mL

Sample 4: 16 μ L of 7.5 IU/mL + 224 μ L of PBS-BSA = 0.5 IU/mL

Incubations

	Start time	End Time	Number Washes
Incubation 1 (RBC and samples)	10:27	11:07	2
Incubation 2 (Secondary Antibody)	11:40	12:10	2

Pipettes Used

LIMS# 5653 Expiry 6 MAR 2017

LIMS# 5646 Expiry 6 MAR 2017

LIMS# 30026 Expiry 6 MAR 2017

LIMS# 32024 Expiry 23 APR 2017

LIMS# _____ Expiry _____

Worksheet entered by:

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Signed

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24 Jan 17

Results:

- Export the FCS files into a new date-labelled folder on the desktop
- Perform batch analysis on each carousel and export the CMV file to the new folder
- Export the date labelled folder (via USB) to the i Drive for analysis
- Open the CMV file in Anti-D Excel template, and sort the data into dose tables for statistical analysis
- Analyse via parallel line analysis in CombiStats using the Anti-D.epm template
- Once analysis is complete, save the data in the relevant TRIM testing file

System Suitability:

Pass

/

Fail

- 6 peak particles to be run prior to the assay and at the conclusion of the assay.
- Median FITC-A is recorded for each of the 6 populations

System Suitability Criteria:

% difference between populations 4, 5, 6, 7 & 8 is $\leq 1\%$ % difference between population 3 is $< 10\%$ 6 Peak Particles: Batch # AH01 Exp date 11 JAN 2018

	6 Peak Particles: Before Assay Median FITC-A	6 Peak Particles: After Assay Median FITC-A	% difference: $100 - [(Before/After) * 100]$	Acceptance Criteria	Pass / Fail
Population 3	60	60	0	$< 10\%$	PASS
Population 4	1600	1598	-0.13	$\leq 1.0\%$	PASS
Population 5	5023	5027	0.08	$\leq 1.0\%$	PASS
Population 6	15630	15616	-0.09	$\leq 1.0\%$	PASS
Population 7	44144	44187	0.1	$\leq 1.0\%$	PASS
Population 8	92460	92514	0.06	$\leq 1.0\%$	PASS

Parallel Line Analysis:

CombiStats: Use the Anti-D.epm template

Model: Parallel Lines

Design: Completely randomised

Transformation: $y' = \log(y)$

Variance: Observed residuals

- Analyse the Standard against one Sample at a time
- Choose at least 3 doses for the analysis (must be the same doses in both the standard and sample)
- Discuss any deviations with test/sample manager

For the predicted potency to be valid, the ANOVA must meet the following criteria:

- Regression is significant (at least 1 *, preferably 3 ***)
- Non-parallelism is not significant (no stars present)
- Non-linearity is not significant (no stars present)

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Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	S22
Date of assay	17Jan2017

Remarks: Anti-D IgG Survey 2017

Standard			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/vial		
Doses	(1)	(2)	(3)
0.5 IU	3275	2932	3027
0.25 IU	1882	1595	1538
0.125 IU	941	763	767
0.0625 IU	510	430	430

Sample 1			
Id.	Rhophylac		
Lims #	1608003190		
Batch#	4367600001		
Ass. pot.	600 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4619	4621	3448
0.25 IU	2525	2617	1778
0.125 IU	1274	1346	949
0.0625 IU	736	747	540

Sample 2			
Id.	Rh(D) IgG		
Lims #	1608003191		
Batch#	3690850044		
Ass. pot.	200 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3631	3455	3324
0.25 IU	1830	1617	1526
0.125 IU	987	853	768
0.0625 IU	544	477	446

Sample 3			
Id.	Rh(D) IgG		
Lims #	1608003192		
Batch#	3680010064		
Ass. pot.	525 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4358	3527	3499
0.25 IU	2017	1638	1647
0.125 IU	1032	846	843
0.0625 IU	552	442	466

Sample 4			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3249	3185	3111
0.25 IU	1684	1626	1519
0.125 IU	896	882	836
0.0625 IU	507	513	444

Model: Parallel lines

Design: Completely randomised

Transformation: $y' = \log(y)$

Variance: Observed residuals

Common slope(factor) = 0.403703 (0.389136 to 0.418269)

Correlation | r |: 0.989728

Source of variation	Degrees of freedom	Sum of squares	Mean square	F-ratio	Probability
Preparations	4	0.168045	0.0420113	15.579	0.000 (***)
Regression	1	5.87266	5.87266	>1000	0.000 (***)
Non-parallelism	4	0.00759236	0.00189809	0.704	0.594
Non-linearity	10	0.0105829	0.00105829	0.392	0.942
Standard	2	0.00140860	0.000704300	0.261	0.771
Sample 1	2	0.000827767	0.000413884	0.153	0.858
Sample 2	2	0.00397916	0.00198958	0.738	0.485
Sample 3	2	0.00289292	0.00144646	0.536	0.589
Sample 4	2	0.00147448	0.000737239	0.273	0.762
Treatments	19	6.05888	0.318889	118.252	0.000 (***)
Residual error	40	0.107868	0.00269669		
Total	59	6.16675	0.104521		

Sample 1			
Id.	Rhophylac		
(IU/ml)	Lower limit	Estimate	Upper limit
Potency	778.346	866.016	964.891
Rel. to Ass.	129.7%	144.3%	160.8%
Rel. to Est.	89.9%	100.0%	111.4%

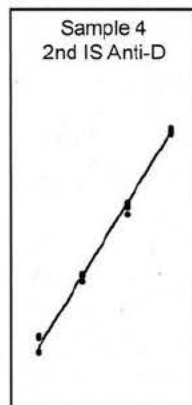
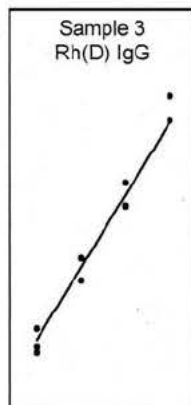
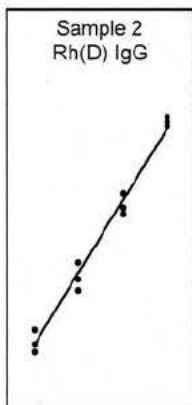
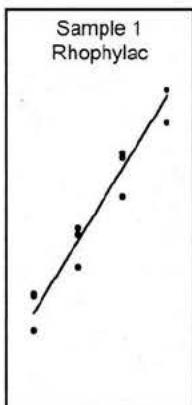
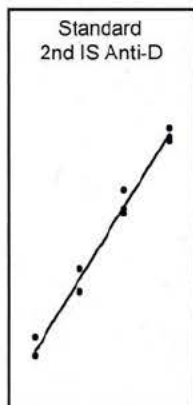
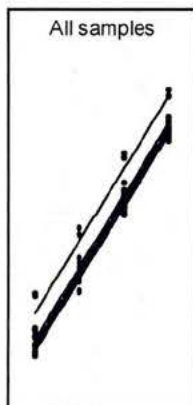
Sample 2			
Id.	Rh(D) IgG		
(IU/ml)	Lower limit	Estimate	Upper limit
Potency	191.577	213.031	236.945
Rel. to Ass.	95.8%	106.5%	118.5%
Rel. to Est.	89.9%	100.0%	111.2%



Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	s22
Date of assay	17Jan2017

Sample 3			
Id.	Rh(D) IgG		
(IU/ml)	Lower limit	Estimate	Upper limit
Potency	528.443	587.614	653.688
Rel. to Ass.	100.7%	111.9%	124.5%
Rel. to Est.	89.9%	100.0%	111.2%

Sample 4			
Id.	2nd IS Anti-D		
(IU/ml)	Lower limit	Estimate	Upper limit
Potency	265.231	294.943	328.026
Rel. to Ass.	93.1%	103.5%	115.1%
Rel. to Est.	89.9%	100.0%	111.2%



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17 JAN 2017



Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	s22
Date of assay	17Jan2017

Remarks: Anti-D IgG Survey 2017

Standard			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/vial		
Doses	(1)	(2)	(3)
0.5 IU	3275	2932	3027
0.25 IU	1882	1595	1538
0.125 IU	941	763	767
0.0625 IU	510	430	430

Sample 1			
Id.	Rhophylac		
Lims #	1608003190		
Batch#	4367600001		
Ass. pot.	600 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4619	4621	3448
0.25 IU	2525	2617	1778
0.125 IU	1274	1346	949
0.0625 IU	736	747	540

Sample 2			
Id.	Rh(D) IgG		
Lims #	1608003191		
Batch#	3690850044		
Ass. pot.	200 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3634	3455	3324
0.25 IU	1830	1617	1526
0.125 IU	987	853	768
0.0625 IU	544	477	446

Sample 3			
Id.	Rh(D) IgG		
Lims #	1608003192		
Batch#	3680010064		
Ass. pot.	525 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4358	3527	3499
0.25 IU	2017	1638	1647
0.125 IU	1032	846	843
0.0625 IU	552	442	466

Sample 4			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3249	3185	3111
0.25 IU	1684	1626	1519
0.125 IU	896	882	836
0.0625 IU	507	513	444

Model: Parallel lines
 Design: Completely randomised
 Transformation: $y' = \log(y)$
 Variance: Observed residuals

Common slope(factor) = 0.395091 (0.364979 to 0.425203)
 Correlation | r | : 0.985248

Source of variation	Degrees of freedom	Sum of squares	Mean square	F-ratio	Probability
Preparations	1	0.131688	0.131688	30.713	0.000 (***)
Regression	1	2.24991	2.24991	524.737	0.000 (***)
Non-parallelism	1	0.00101370	0.00101370	0.236	0.633
Non-linearity	4	0.00223637	0.000559092	0.130	0.969
Standard	2	0.00140860	0.000704300	0.164	0.850
Sample 1	2	0.000827767	0.000413884	0.097	0.909
Treatments	7	2.38485	0.340693	79.458	0.000 (***)
Residual error	16	0.0686032	0.00428770		
Total	23	2.45345	0.106672		

Sample 1			
Id.	Rhophylac		
(IU/ml)	Lower limit	Estimate	Upper limit
Potency	755.135	872.971	1015.75
Rel. to Ass.	125.9%	145.5%	169.3%
Rel. to Est.	86.5%	100.0%	116.4%

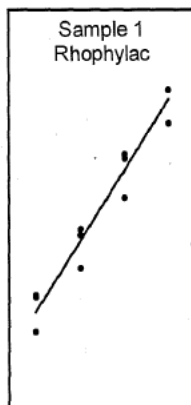
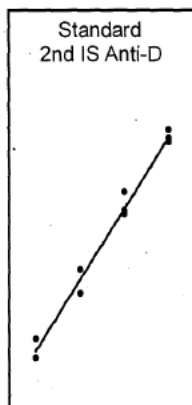
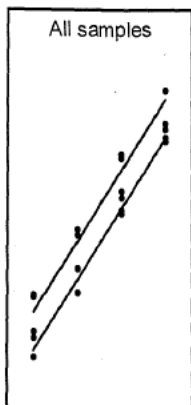
$$50 \times 2 = 1745.9 \text{ IU} / 2 \text{ mL} (\div 5 = 349.2 \mu\text{g}/\text{mL})$$

s22
17 Jan 2017

Validated s22
24/01/17



Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	S22
Date of assay	17Jan2017



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Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	s22
Date of assay	17Jan2017

Remarks: Anti-D IgG Survey 2017

Standard			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/vial		
Doses	(1)	(2)	(3)
0.5 IU	3275	2932	3027
0.25 IU	1882	1595	1538
0.125 IU	941	763	767
0.0625 IU	510	430	430

Sample 1			
Id.	Rhophylac		
Lims #	1608003190		
Batch#	4367600001		
Ass. pot.	600 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4619	4624	3448
0.25 IU	2525	2617	1778
0.125 IU	1274	1346	949
0.0625 IU	736	747	540

Sample 2			
Id.	Rh(D) IgG		
Lims #	1608003191		
Batch#	3690850044		
Ass. pot.	200 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3631	3455	3324
0.25 IU	1830	1617	1526
0.125 IU	987	853	768
0.0625 IU	544	477	446

Sample 3			
Id.	Rh(D) IgG		
Lims #	1608003192		
Batch#	3680010064		
Ass. pot.	525 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4358	3527	3499
0.25 IU	2017	1638	1647
0.125 IU	1032	846	843
0.0625 IU	552	442	466

Sample 4			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3249	3185	3111
0.25 IU	1684	1626	1519
0.125 IU	896	882	836
0.0625 IU	507	513	444

Model: Parallel lines
 Design: Completely randomised
 Transformation: $y' = \log(y)$
 Variance: Observed residuals

Common slope(factor) = 0.406460 (0.387062 to 0.425859)
 Correlation | r |: 0.992950

Source of variation	Degrees of freedom	Sum of squares	Mean square	F-ratio	Probability
Preparations	1	0.00389614	0.00389614	2.190	0.158
Regression	1	2.38127	2.38127	>1000	0.000 (***)
Non-parallelism	1	0.000128276	0.000128276	0.072	0.792
Non-linearity	4	0.00538776	0.00134694	0.757	0.568
Standard	2	0.00140860	0.000704300	0.396	0.680
Sample 2	2	0.00397916	0.00198958	1.118	0.351
Treatments	7	2.39068	0.341526	191.926	0.000 (***)
Residual error	16	0.0284714	0.00177946		
Total	23	2.41915	0.105181		

Sample 2			
Id.	Rh(D) IgG		
(IU/ml)	Lower limit	Estimate	Upper limit
Potency	194.645	212.940	233.053
Rel. to Ass.	97.3%	106.5%	116.5%
Rel. to Est.	91.4%	100.0%	109.4%

$$50 \times 1.62 \text{ ml} = 344.96 \text{ IU/vial}$$

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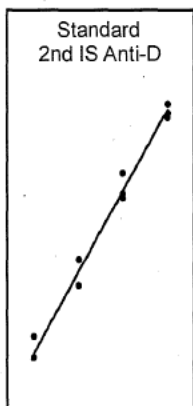
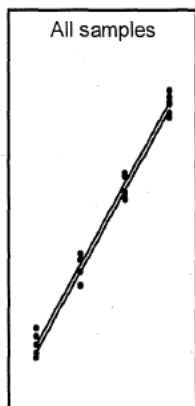
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24/01/17



Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	s22
Date of assay	17Jan2017



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Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	s22
Date of assay	17Jan2017

Remarks: Anti-D IgG Survey 2017

Standard			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/vial		
Doses	(1)	(2)	(3)
0.5 IU	3275	2932	3027
0.25 IU	1882	1595	1538
0.125 IU	941	763	767
0.0625 IU	510	430	430

Sample 1			
Id.	Rhophylac		
Lims #	1608003190		
Batch#	4367600001		
Ass. pot.	600 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4619	4621	3448
0.25 IU	2525	2617	1778
0.125 IU	1274	1346	949
0.0625 IU	736	747	540

Sample 2			
Id.	Rh(D) IgG		
Lims #	1608003191		
Batch#	3690850044		
Ass. pot.	200 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3631	3455	3324
0.25 IU	1839	1617	1526
0.125 IU	987	853	768
0.0625 IU	544	477	446

Sample 3			
Id.	Rh(D) IgG		
Lims #	1608003192		
Batch#	3680010064		
Ass. pot.	525 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4358	3527	3499
0.25 IU	2017	1638	1647
0.125 IU	1032	846	843
0.0625 IU	552	442	466

Sample 4			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3249	3185	3111
0.25 IU	1684	1626	1519
0.125 IU	896	882	836
0.0625 IU	507	513	444

Model: Parallel lines

Design: Completely randomised

Transformation: $y' = \log(y)$

Variance: Observed residuals

Common slope(factor) = 0.415582 (0.393787 to 0.437377)

Correlation |r|: 0.991641

Source of variation	Degrees of freedom	Sum of squares	Mean square	F-ratio	Probability
Preparations	1	0.0124139	0.0124139	5.526	0.032 (*)
Regression	1	2.48935	2.48935	>1000	0.000 (***)
Non-parallelism	1	0.00211206	0.00211206	0.940	0.347
Non-linearity	4	0.00430152	0.00107538	0.479	0.751
Standard	2	0.00140860	0.000704300	0.314	0.735
Sample 3	2	0.00289292	0.00144646	0.644	0.538
Treatments	7	2.50818	0.358311	159.512	0.000 (***)
Residual error	16	0.0359408	0.00224630		
Total	23	2.54412	0.110614		

Sample 3			
Id.	Rh(D) IgG		
(IU/ml)	Lower limit	Estimate	Upper limit
Potency	530.674	585.725	647.063
Rel. to Ass.	101.1%	111.6%	123.3%
Rel. to Est.	90.6%	100.0%	110.5%

50 x 1.32 ml = 773.16 IU/vial

Validated

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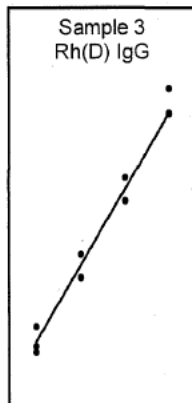
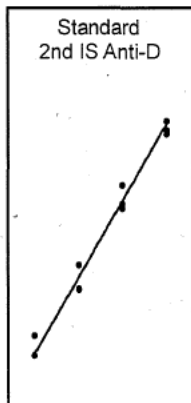
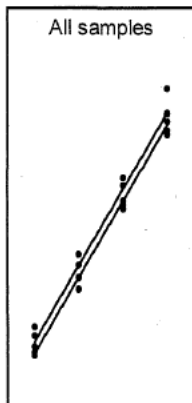
17Jan2017

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24/01/17



Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	s22
Date of assay	17Jan2017



Executed by:

Calculated by:

Approved by:



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Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	s22
Date of assay	17Jan2017

Remarks: Anti-D IgG Survey 2017

Standard			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/vial		
Doses	(1)	(2)	(3)
0.5 IU	3275	2932	3027
0.25 IU	1882	1595	1538
0.125 IU	941	763	767
0.0625 IU	510	430	430

Sample 1			
Id.	Rhophylac		
Lims #	1608003190		
Batch#	4367600001		
Ass. pot.	600 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4619	4624	3448
0.25 IU	2626	2617	1778
0.125 IU	1274	1346	949
0.0625 IU	736	747	540

Sample 2			
Id.	Rh(D) IgG		
Lims #	1608003191		
Batch#	3690850044		
Ass. pot.	200 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3634	3455	3324
0.25 IU	1830	1617	1626
0.125 IU	987	853	768
0.0625 IU	544	477	446

Sample 3			
Id.	Rh(D) IgG		
Lims #	1608003192		
Batch#	3680010064		
Ass. pot.	525 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	4358	3527	3499
0.25 IU	2047	1638	1647
0.125 IU	1032	846	843
0.0625 IU	552	442	466

Sample 4			
Id.	2nd IS Anti-D		
Batch#	01/572		
Ass. pot.	285 IU/ml		
Doses	(1)	(2)	(3)
0.5 IU	3249	3185	3111
0.25 IU	1684	1626	1519
0.125 IU	896	882	836
0.0625 IU	507	513	444

Model: Parallel lines

Design: Completely randomised

Transformation: $y' = \log(y)$

Variance: Observed residuals

Common slope(factor) = 0.397339 (0.381582 to 0.413096)

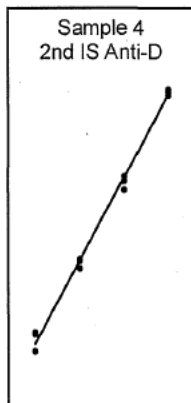
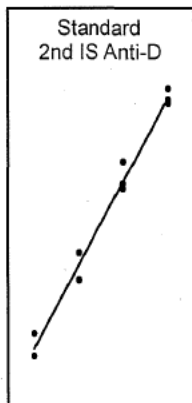
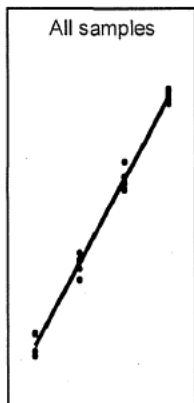
Correlation | r | : 0.995158

Source of variation	Degrees of freedom	Sum of squares	Mean square	F-ratio	Probability
Preparations	1	0.00114996	0.00114996	0.979	0.337
Regression	1	2.27559	2.27559	>1000	0.000 (***)
Non-parallelism	1	0.000543061	0.000543061	0.463	0.506
Non-linearity	4	0.00288308	0.000720770	0.614	0.659
Standard	2	0.00140860	0.000704300	0.600	0.561
Sample 4	2	0.00147448	0.000737239	0.628	0.546
Treatments	7	2.28017	0.325738	277.447	0.000 (***)
Residual error	16	0.0187849	0.00117406		
Total	23	2.29895	0.0999545		

Sample 4			
Id.	2nd IS Anti-D		
(IU/ml)	Lower limit	Estimate	Upper limit
Potency	273.876	295.105	318.031
Rel. to Ass.	96.1%	103.5%	111.6%
Rel. to Est.	92.8%	100.0%	107.8%



Substance	Anti-D IgG
Method	Anti-D Flow
Analyst	S22
Date of assay	17Jan2017



Executed by:

Calculated by:

Approved by:

Tube Name	P1 FITC-A Median	P2 FITC-A Median	P3 FITC-A Median	P4 FITC-A Median	P5 FITC-A Median	P6 FITC-A Median	P7 FITC-A Median	P8 FITC-A Median
6 Peak Beads Start	6974	6935	60 ✓	1600 ✓	5023 ✓	15630 ✓	44144 ✓	92460 ✓
IS-1 0-5 IU	3275 ✓	3055	126	1789	4537			88635
IS-1 0-25 IU	1882 ✓	1830	176	1632	4629	15826		92894
IS-1 0-125 IU	941 ✓	882	91	1446	4520			100397
IS-1 0-063 IU	510 ✓	469	115	1305	5382			
T1-1 0-5 IU	4619 ✓	3859		1759	4812			
T1-1 0-25 IU	2525 ✓	2459		1764	4523			
T1-1 0-125 IU	1274 ✓	1235		1616	4172			
T1-1 0-063 IU	736 ✓	692	116	1440	6086			
T2-1 0-5 IU	3631 ✓	3469		1771	4592		37042	
T2-1 0-25 IU	1830 ✓	1654	125	1613	4801			
T2-1 0-125 IU	987 ✓	931	77	1397				
T2-1 0-063 IU	544 ✓	521	112					
T3-1 0-5 IU	4358 ✓	4188	84	1908	4868	13073	41389	
T3-1 0-25 IU	2017 ✓	1912	31	1740	4416			
T3-1 0-125 IU	1032 ✓	1005	58	1463				
T3-1 0-063 IU	552 ✓	518	135	1360				
T4-1 0-5 IU	3249 ✓	3054		1831	4541			
T4-1 0-25 IU	1684 ✓	1557	106	1626	5507			
T4-1 0-125 IU	896 ✓	844	145	1446				
T4-1 0-063 IU	507 ✓	494	151	1361				
IS-2 0-5 IU	2932 ✓	2684	53	1754	4298	13727		
IS-2 0-25 IU	1595 ✓	1474	96	1563	4369			
IS-2 0-125 IU	763 ✓	709	139	1363				
IS-2 0-063 IU	430 ✓	424	146					
T1-2 0-5 IU	4621 ✓	4220	91	1863	4858			
T1-2 0-25 IU	2617 ✓	2459	81	1735	4518			
T1-2 0-125 IU	1346 ✓	1278		1535				
T1-2 0-063 IU	747 ✓	700		1552				
T2-2 0-5 IU	3455 ✓	2989	119	1752	4456			
T2-2 0-25 IU	1617 ✓	1562		1600	4244			
T2-2 0-125 IU	853 ✓	828		1372				
T2-2 0-063 IU	477 ✓	474	145	1397				
T3-2 0-5 IU	3527 ✓	3098	44	1740	4570			
T3-2 0-25 IU	1638 ✓	1529		1607	5366			

T3-2 0-125 IU	846 ✓	422	152	1344				
T3-2 0-063 IU	442 ✓	422	152	1344				
T4-2 0-5 IU	3185 ✓	2888	102	1751	4465			
T4-2 0-25 IU	1626 ✓	1573		1615	4379			
T4-2 0-125 IU	882 ✓	828		1452				
T4-2 0-063 IU	513 ✓	469	163	1531				
IStd-3 0-5 IU	3027 ✓	2556		1713	4372			
IStd-3 0-25 IU	1538 ✓	1407		1500	4349			
IStd-3 0-125 IU	767 ✓	694		1416				
IStd-3 0-063 IU	430 ✓	394	142	1399				
T1-3 0-5 IU	3448 ✓	3042	168	1797	4685			
T1-3 0-25 IU	1778 ✓	1561	62	1571	3962			
T1-3 0-125 IU	949 ✓	897		1397				
T1-3 0-063 IU	540 ✓	524	163	1544				
T2-3 0-5IU	3324 ✓	2896		1746	4571			
T2-3 0-25IU	1526 ✓	1380	92	1595	4291			
T2-3 0-125IU	768 ✓	716		1444				
T2-3 0-063IU	446 ✓	444	153	1482				
T3-3 0-5IU	3499 ✓	3006		1808	4430	16195		
T3-3 0-25IU	1647 ✓	1471		1576	4014			
T3-3 0-125IU	843 ✓	812		1352	3922			
T3-3 0-063IU	466 ✓	449	165		5092			
T4-3 0-5IU	3111 ✓	2692		1799	4474			
T4-3 0-25IU	1519 ✓	1387		1538	5504			
T4-3 0-125IU	836 ✓	775	87	1430				
T4-3 0-063IU	444 ✓	420	104	1482	4489			
R1R1-1	91 ✓	91	91	1850				
R1R1-2	92 ✓	99	98	1602				
rr-1	74 ✓	84	90					
rr-2	74 ✓	81	86					
6 Peaks End	8544	7067	60 ✓	1598 ✓	5027 ✓	15616 ✓	44187 ✓	92514 ✓

Checked data.
s22
2017.

Tube Name	Record Date	P1 %Parent	P1 FITC-A Mean	P1 PE-A Mean	P1 PerCP-Cy5- 5-A Mean	P1 PE-Cy7-A Mean	P1 APC-A Mean	P1 APC-Cy7-A Mean
Rep1	Jan 17, 2017	100	4880	4214	3819	3632	5299	4602

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

Passes

QC

s22

17 JAN 2017

checked

s22

20/01/2017

Validated

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24/01/17.

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Office of Laboratories and
 Scientific Services

Operations Biochemistry – Forms	
Procedure	Forms – Reagent Preparation Record
Written	s22
Authorised	s22
Date issued	20/06/2014
Revision #	3

Reagent Name: <u>PBS/BSA</u>	Final Volume: <u>100ml</u>
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Prepared by: <u>s22</u>	Date: <u>17 JAN 2017</u>	Expiry Date: <u>24 JAN 2017</u>	Batch #: eg. LB01OCT09-1 <u>s22 17 JAN 17-1</u>	Storage Temperature: <u>2-8°C</u>
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Component	Manufacturer	Batch #	Required Amount	Measured Amount	Balance / Pipette LIMS #	Final Conc (% , mM, etc)
Albumin, bovine serum	SIGMA-A	SLBP2256V	1g	1.002g	32126	1%
PBS	s22	s22 17 JAN 17-1	100ml	100ml	volumetric	

pH Adjustment	Target pH: <u>—</u>	Initial pH: <u>—</u>	Adjusted with: HCl / HNO ₃ / H ₂ SO ₄ / H ₃ PO ₄ NaOH / KOH / Other: <u>—</u>	Final pH: <u>—</u>	pH Electrode LIMS#: (circle) 8165 / 32109
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Filtration (circle):	<u>None</u>	0.45µm	0.2µm	Other: <u>—</u>
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Other Comments:	
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Attach Balance Printout Here

17-Jan-2017 09:02:12

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Office of Laboratories and
Scientific Services

Operations Biochemistry – Forms	
Procedure	Forms – Reagent Preparation Record
Written	s22
Authorised	s22
Date issued	20/06/2014
Revision #	3

Reagent Name: PBS

Final Volume: 200ml

Prepared by:

s22

Date:

13/01/2017

Expiry Date:

13/02/2017

Batch #: eg. LB01OCT09-1

s22 13 Jan 2017 - 1

Storage Temperature:

2-8°C

Component	Manufacturer	Batch #	Required Amount	Measured Amount	Balance / Pipette LIMS #	Final Conc (% , mM, etc)
Phosphate Buffer Saline	SIGMA	05/18213	1 tablet	1 tablet	N/A	
Ultra pure H ₂ O			200ml	200ml	vol. flask	

pH Adjustment

Target pH:

N/A

Initial pH:

N/A

Adjusted with:

HCl / HNO₃ / H₂SO₄ / H₃PO₄

NaOH / KOH / Other: N/A

Final pH:

N/A

pH Electrode LIMS#: (circle)

8165 / 32109

Filtration (circle):

None

0.45µm

0.2µm

Other: _____

Other Comments:

Attach Balance Print Outs Here

Record Details
Last Editor
Print Date

R14 814225 Forms - Reagent Preparation Record

s22
3/01/2017 11:42 AM

Edit Date

23/06/2014 12:08 PM

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Operations Biochemistry – Forms	
Procedure	Forms – Reagent Preparation Record
Written	s22
Authorised	s22
Date issued	20/06/2014
Revision #	3

Reagent Name: PBS/BSA for Anti-D

Final Volume: 200ml

Prepared by: s22	Date: <u>11 JAN 2017</u>	Expiry Date: <u>18 JAN 2017</u>	Batch #: eg. LB01OCT09-1 s22 <u>11 JAN 2017-1</u>	Storage Temperature: <u>2-8°C</u>
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Component	Manufacturer	Batch #	Required Amount	Measured Amount	Balance / Pipette LIMS #	Final Conc (% , mM, etc)
Albumin, bovine serum	SIGMA-A	SLBD2256V	2g	2.001g	32126	1%
PBS	s22	s22 <u>11 JAN 2017-4</u>	200 ML	200ML	volumetric	

pH Adjustment	Target pH: <u>7.4</u>	Initial pH: <u> </u>	Adjusted with: HCl / HNO ₃ / H ₂ SO ₄ / H ₃ PO ₄ NaOH / KOH / Other: <u> </u>	Final pH: <u> </u>	pH Electrode LIMS#: (circle) 8165 / 32109

Filtration (circle):	<u>None</u>	0.45µm	0.2µm	Other: <u> </u>
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Other Comments:	
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Operations	Biochemistry – Forms
Procedure	Forms – Reagent Preparation Record
Written	s22
Authorised	s22
Date issued	20/06/2014
Revision #	3

Reagent Name: <u>PBS for Anti-D</u>	Final Volume: <u>400ml</u>
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Prepared by: s22	Date: <u>3 JAN 2017</u>	Expiry Date: <u>3 FEB 2017</u>	Batch #: eg. LB01OCT09-1 s22 <u>3 JAN 2017-4</u>	Storage Temperature: <u>2-8°C</u>
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Component	Manufacturer	Batch #	Required Amount	Measured Amount	Balance / Pipette LIMS #	Final Conc (% , mM, etc)
Phosphate Buffered Saline H ₂ O	SiCMA Arium	051M8213	2 tablets 400ml	2 tablets 400ml	— volumetric	

pH Adjustment	Target pH: <u>—</u>	Initial pH: <u>—</u>	Adjusted with: HCl / HNO ₃ / H ₂ SO ₄ / H ₃ PO ₄ NaOH / KOH / Other: <u> </u>	Final pH: <u> </u>	pH Electrode LIMS#: (circle) 8165 / 32109
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Filtration (circle):	<u>None</u>	0.45µm	0.2µm	Other: <u> </u>
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Other Comments:	
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Record Details
Last Editor
Print Date

R14 814225 Forms - Reagent Preparation Record(2)
s22
3/01/2017 11:50 AM

Edit Date

23/06/2014 12:08 PM
Page 1 of 1

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