OVERVIEW

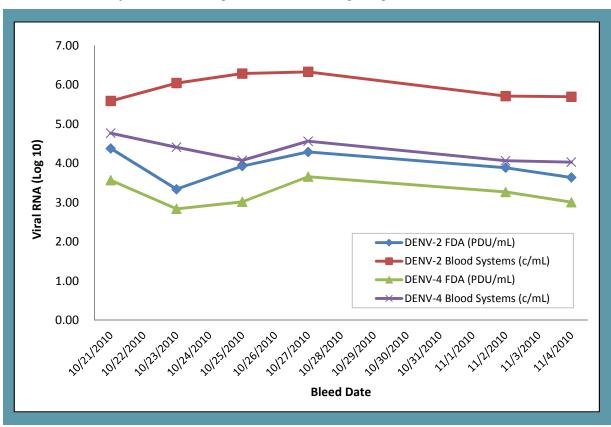
Dengue Early Infection Performance Panel (0845-0050) is a 6-member panel of undiluted, naturally occurring plasma samples. Panel members represent serial bleeds collected over the course of 14 days from a single individual during the development of a dengue infection and subsequent response. No preservatives were added.

Test results from commercially-available dengue assays are included for characterization of the panel members. This panel of human plasma samples is positive for dengue RNA, NS1 antigen, IgM and IgG antibodies.

For Research Use Only. Not for use in diagnostic procedures. Data are provided for information purposes. SeraCare Life Sciences does not claim that others can duplicate test results exactly.

CAUTION: Potentially infectious materials. Follow Universal Precautions. All panel members were found to be negative for HBsAq, anti-HIV, and anti-HCV.

Expression of Dengue Viral RNA during Progression of Infection



This graph demonstrates the development and progression of a dengue infection in a single individual. Dengue viral RNA for dengue virus serotypes 2 and 4 are measured with quantitative real-time PCR analysis.



Dengue Virus RNA

Dengue Virus RNA TaqMan RT-PCR (Qualitative)¹

Panel Member	Bleed Date	DENV-1	DENV-2	DENV-3	DENV-4		
01	21-Oct-10	NEG	POS	NEG	POS		
02	23-Oct-10	NEG	POS	NEG	POS		
03	25-Oct-10	NEG	POS	NEG	POS		
04	27-Oct-10	NEG	POS	NEG	POS		
05	02-Nov-10	NEG	POS	NEG	POS		
06	04-Nov-10	NEG	POS	NEG	POS		
Test Date		22-Aug-12					
Test Site		RL					
Kit Part Code		NA					
Kit Lot No.		NA					
Kit Exp Date		NA					
Kit Regulatory Status		RUO					

¹Qualitative real-time PCR test performed at the Center for Biologics Evaluation and Research (CBER), US Food and Drug Administration (FDA).

Dengue Virus RNA

Dengue Virus RNA TaqMan RT-PCR (Quantitative)¹

Panel Member	Bleed Date	DENV-2 (PDU/mL (log ₁₀))	DENV-2 (Ct) ²	DENV-4 (PDU/mL (log ₁₀))	DENV-4 (Ct) ²	
01	21-Oct-10	24155 (4.38)	31.6	3704 (3.57)	36.0	
02	23-Oct-10	2182 (3.34)	35.7	696 (2.84)	39.0	
03	25-Oct-10	8495 (3.93)	33.4	1054 (3.02)	38.0	
04	27-Oct-10	19410 (4.29)	32.0	4604 (3.66)	35.6	
05	02-Nov-10	7736 (3.89)	33.5	1865 (3.27)	37.2	
06	04-Nov-10	4341 (3.64)	34.6	1028 (3.01)	38.3	
Test Date		22-Aug-12				
Test Site		RL				
Kit Part Code		NA				
Kit Lot No.		NA				
Kit Exp Date		NA				
Kit Regulatory Status		RUO				
Kit Regulatory Status Quantitative real-time PCR test performed at the Center for Biologics Evaluation and Research (CBER). US Food and Drug Administration (FDA						

RL = Reference Lab; NA = Not Available; RUO = Research Use Only



NEG = Negative; POS = Positive

RL = Reference Lab; NA = Not Available; RUO = Research Use Only

²Results are reported as the average of six replicates.

Dengue Virus RNA

Dengue Virus RNA TagMan RT-PCR (Quantitative)1

	rayman ni-ron (Quantitative)							
Panel Member	Bleed Date	DENV-1 (Ct) ²	DENV-2 (Ct) ²	DENV-3 (Ct) ²	DENV-4 (Ct) ²			
01	21-Oct-10	30.7	29.0	NEG	29.3			
02	23-Oct-10	NEG	27.5	NEG	30.4			
03	25-Oct-10	NEG	26.6	NEG	31.5			
04	27-Oct-10	30.6	26.5	NEG	29.9			
05	02-Nov-10	37.0	28.6	NEG	31.5			
06	04-Nov-10	34.5	28.6	NEG	31.6			
Test Date		20-Jun-12						
Test Site		RL						
Kit Part Code		NA						
Kit Lot No.		NA						
Kit Exp Date		NA						
Kit Regulatory Status		RUO						

Quantitative real-time PCR test performed at the Blood Systems Research Institute.

NEG = Negative

Dengue Virus RNA

Dengue Virus RNA TaqMan RT-PCR (Quantitative)¹

Panel Member	Bleed Date	DENV-1 (copies/mL) ²	DENV-2 (copies/mL) ²	DENV-3 (copies/mL) ²	DENV-4 (copies/mL) ²	
01	21-Oct-10	212669	389910	NEG	58857	
02	23-Oct-10	NEG	1116916	NEG	25735	
03	25-Oct-10	NEG	1949351	NEG	11920	
04	27-Oct-10	227445	2148557	NEG	36585	
05	02-Nov-10	2231	519077	NEG	11651	
06	04-Nov-10	13057	500149	NEG	10744	
Test Date		20-Jun-12				
Test Site		RL				
Kit Part Code		NA				
Kit Lot No.	NA					
Kit Exp Date		NA				
Kit Regulatory Status	RUO					

Quantitative real-time PCR test performed at the Blood Systems Research Institute.

NEG = Negative



²Associated Ct values are reported as the average value from 2 runs.

RL = Reference Lab; NA = Not Available; RUO = Research Use Only

²Results are reported as copies/mL of plasma.

RL = Reference Lab; NA = Not Available; RUO = Research Use Only

Dengue Virus NS1 Antigen

Panel Member	Bleed Date	Panbio Dengue Early ELISA NS1 Antigen ¹
01	21-Oct-10	28.2
02	23-Oct-10	7.0
03	25-Oct-10	28.2
04	27-Oct-10	28.2
05	02-Nov-10	6.9
06	04-Nov-10	28.2
Test Date		26-Feb-14
Test Site		SC
Kit Part Code		01PE40
Kit Lot No.		253003
Kit Exp Date		20-Aug-14
Kit Regulatory Status		CE

Results are reported as an index value. Values greater than 1.1 are considered positive/reactive and are noted in bold red.

Dengue Virus Antibodies

Panel Member	Bleed Date	Panbio Dengue IgG Indirect ELISA ¹	Focus Diagnostics Dengue Virus DxSelect [™] IgG ^{2,3}	Calbiotech Dengue Virus IgM ELISA ^{1,3}	Focus Diagnostics Dengue Virus DxSelect TM IgM ^{2,3}
01	21-Oct-10	1.3	3.7	0.1	1.6
02	23-Oct-10	1.6	4.4	0.2	2.2
03	25-Oct-10	1.3	2.6	0.1	1.4
04	27-Oct-10	1.1	3.7	0.1	1.6
05	02-Nov-10	1.3	4.3	0.1	0.8
06	04-Nov-10	1.2	3.0	0.2	1.5
Test Date		21-Nov-11 and 18-Oct-12	28-Jan-14	07-Feb-14	28-Jan-14
Test Site		SC	SC	SC	SC
Kit Part Code		E-DEN01G	EL1500G	DE051M	EL1500M
Kit Lot No.		11080	X23223	DEM4165	23248
Kit Exp Date		28-Feb-13	31-May-15	31-Dec-14	30-Apr-15
Kit Regulatory Status		CE	CE	IVD/CE	CE

Results are reported as an index value. Values greater than 1.1 are considered positive/reactive and are noted in bold red. Values in the range of 0.9 – 1.1 are equivocal.

The Package Insert for this panel in PDF form can be found at www.seracare.com

A printed copy of the Package Insert or Data Sheet may be requested by email at info@seracare.com, or by phone at 508.244.6400

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- AccuTypeTM Viral Isolates
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SC = SeraCare; CE = Conformité Européenne or CE Marking

²Results are reported as an index value. Values greater than 1.0 are considered positive/reactive and are noted in bold red. ³Results are reported as the mean result of duplicate testing.

SC = SeraCare; IVD = In Vitro Diagnostic; CE = Conformité Européenne or CE Marking