

Virus Name: Pueblo Viejo		Abbreviation: PVV
Status Possible Arbovirus	Select Agent No	SALS Level 3
SALS Basis Insufficient experience with virus; i.e., experience factor from SALS surveys was less than 500 in laboratory facilities with low biocontainment.		
Other Information		
Antigenic Group Gamboia		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation E4-816	Accession Number	Original Date Submitted 9/19/1984
Family Bunyaviridae	Genus Bunyavirus	
Information From Division of Vector-Borne Viral Diseases	Address P.O. Box 2087, Fort Collins, Colorado 80522	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) D.B. Francy and J.S. Lazuick	Isolated at Institute DVBVD	
Host Genus Aedeomyia squamipennis	Species	Host Age/Stage Adult
Sex Female		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod Depleted	
Time Held Alive before Inoculation Nil		
Collection Method CDC light trap with CO2	Collection Date 7/18/1974	
Place Collected (Minimum of City, State, Country) Abras (near Vinces), Ecuador, South America		
Latitude 1° 30' S	Longitude 79° 30' W	
Macrohabitat	Microhabitat	Method of Storage until Inoculated Dry ice and mechanical freezer (-60dC)
Footnotes		

Section III - Method of Isolation

Inoculation Date
8/21/1974

Animal (Details will be in Section 6)
(Tissue Culture)

Route Inoculated
Reisolation
Yes

Other Reasons

Homologous Antibody Formation by Source Animal

Test(s) Used

Footnotes

Section IV - Virus Properties

Physicochemical

Pieces (number of genome segments)	Infectivity	Sedimentation Coefficients(s) (S)
Percentage wt, of Virion Protein	Lipid	Carbohydrate
Virion Polypeptides: Number	Details	
Non-virion Polypeptides: Number	Details	
Virion Density	Sedimentation Coefficients(s) (S)	
Nucleocapsid Density	Sedimentation Coefficients(s) (S)	

Stability of Infectivity (effects)

pH (infective range)

Lipid Solvent (ether - % used to test)	After Treatment Titer	Control Titer
Lipid Solvent (chloroform)	After Treatment Titer	Control Titer
Lipid Solvent (deoxycholate) 1:2000	After Treatment Titer <2.0 dex	Control Titer 4.7 dex
Other (formalin, radiation)		

Virion Morphology

Shape	Dimensions	
Mean nm	Range nm	
Measurement Method	Surface Projections/Envelope	Nucleocapsid Dimensions, Symmetry

Morphogenesis

Site of Constituent Formation in Cell Site of Virion Assembly Site of Virion Accumulation

Inclusion Bodies Other

Hemagglutination

Hemagglutination Antigen Source Erythrocytes (species used)
No **SMB, Vero cell fluid** **Goose**

pH Range pH Optimum
5.75-7.0

Temperature Range Temperature Optimum
RT and 4dC

Remarks

Serologic Methods Recommended
PRNT, CF

Footnotes

Section V - Antigenic Relationship and Lack of Relationship to Other Viruses

Serum dilution plaque reduction neutralization (N) tests with prototype Gamboa virus (MARU-10962) and strains E4-816, MARU-11079 and 75V-446 [1].

Virus	Strain	Titer of NT antibody to:			
		MARU-10962	E4-816	MARU-11079	75V-446
Gamboa	MARU-10962	640 ^b	80	40	10
Pueblo Viejo	E4-816	80	640	40	<20
Alajuela	MARU-11079	<40	<80	> 1280	<20
San Juan	75V-446	20	<20	40	640

^b Reciprocal of highest dilution producing >90% plaque-reduction.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Vero cell cultures

Cell system (a)	Virus passage history (b)	Evidence of Infection						
		CPE			PLAQUES			Growth Without CPE +/- (g)
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	
Vero (CL)	Orig.				6		2.0 (c)	
Vero (CL)	Vero-1				5		3.7	
Vero (CL)	Vero-2				5		4.7	
Vero (CL)	Vero-5				5		4.9	
DE (PC)						No plaques		

(c) Expressed in dex

Section VII - Natural Host Range (Additional text can be added below table)

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested	Test used	Country and region
Ad squamipennis	7			Ecuador

Section XI - Human Disease

In Nature	Residual	Death
Subclinical	Overt Disease	
Clinical Manifestations		
Number of Cases	Category (i.e. febrile illness, etc.)	

Section XII - Geographic Distribution

Known (Virus detected) Ecuador
Suspected (Antibody only detected)

Section XIII - References

1. Calisher, C.H. et al. 1981. Am. J. Trop. Med. Hyg. 30:219-223.

Remarks

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