

Virus Name: San Juan		Abbreviation: SJV
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 75V446	Accession Number	Original Date Submitted 9/24/1984
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	Isolated at Institute DVBVD, Fort Collins, CO	
Host Genus Aedeomyia squamipennis	Species	Host Age/Stage Adult
Sex Male		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod Depleted	
Time Held Alive before Inoculation		
Collection Method CDC light trap with CO2	Collection Date 8/28/1974	
Place Collected (Minimum of City, State, Country) Papayo, Ecuador, South America		
Latitude 1° 0' N	Longitude 79° 40' W	
Macrohabitat	Microhabitat	Method of Storage until Inoculated Dry ice and mechanical freezer (-60dC)
Footnotes		

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 ext. by sucrose-acetone; Vero cell** **Goose**
 culture fluid

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 N Antibody to:			
		MARU-10962	E4-816	MARU-11079	75V-466
Gamboa	MARU-10962	640 ^a	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

^a 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.				7		2.3 (b)	
Vero (CL)	Vero 1				6		4.9	
Vero (CL)	Vero 2				5		5.2	
Vero (CL)	Vero 4				5		5.0	
Vero (CL)	Vero 4 SM 1				5		4.7	
DE (PC)						No plaques		

(b) 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	17		Ecuador
Ad squamipennis	1		Argentina

Section VIII - Susceptibility to Experimental Infection (include viremia)

Experimental host and age	Passage history and strain	Inoculation Route-Dose	Evidence of infection	AST (days)	Titer log10/ml
Mice (nb)	Orig.	ic	Death	12	
Mice (nb)	Vero 1	ic	Illness, death	14	
Mice (nb)	Vero 2	ic	Death	9	
Mice (nb)	Vero 4	ic	Death	5	
Mice (nb)	Vero 4 SM 1	ic	Death	5	
mice (wn)		ic	None		
hamsters (nb)		ic	None		
mice (nb)		ip	None		

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log10/ml (b)		Incubation period (c)		Transmission by bite (d)		Assay of arthropod, log10/ml (e)		
	Feeding	Injected	Days	°C	Host	Ratio	Whole	Organ	System

Section X - Histopathology

Character of lesions (specify host)	
<u>Inclusion Bodies</u>	<u>Intranuclear</u>
Organs/Tissues Affected	
Category of tropism	

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 and Argentina
Suspected (Antibody only detected)

Section XIII - References

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

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