Virus Name: Vinces	Abbreviation: VINV

Status
Probable Arbovirus

Select Agent
No

SALS Level
2

SALS Basis
Placed at this biosafety level based on close antigenic or genetic relationship to other viruses in a group of 3 or more viruses, all of which are classified at this level.

Other Information

Antigenic Group
Group C

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
75V-807

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
Culex (Mel) vomerifer

Species

Host Age/Stage
Adult

Sex
Female

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod
Depleted

Time Held Alive before Inoculation

Collection Method
CDC light trap with CO2

Collection Date
9/24/1974

Place Collected (Minimum of City, State, Country)
Quininde, Ecuador, South America

Latitude
0° 20' N

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
3/10/1975

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 **5.1 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

Hemaggiutination	Antigen Source	Erythrocytes (species used)
No	**SMB ext. by sucrose-acetone**	**Goose**
pH Range **5.75-7.0**	pH Optimum	
Temperature Range **4dC, RT**	Temperature Optimum	

Remarks

Serologic Methods Recommended
CF, PRNT

Footnotes

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

Antigen of strain 75V-807 was tested by CF with immune mouse ascitic fluids (MIAF) representing viruses of the following serogroups: A, B, C, Bunyamwera, vesicular stomatitis, Capim, Guama, Patois, Simbu, Turlock, Gamboa, Minatitlan, California, and Hart Park. They only reaction was with Group C grouping MIAF. Subsequent tests were performed by serum dilution plaque-reduction neutrali- zation with the following results:

Virus or MIAF	Homologous	75V-807	
		Virus	MIAF
75V-807	1280	1280	1280
Ossa	320	20	320
Gumbo Limbo	160	- [a]	40
Restan	>5120	320	-
Murutucu	>640	40	-
Madrid	320	-	-
Nepuyo	80	-	-
Apeu	160	40	-
Caraparu	160	40	-
Marituba	320	40	-
Itaqui	>640	-	-
Oriboca	>640	20	-

[a] - = <20

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Blood (LV)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Newborn mice and primary avian cell cultures

Cell system (a)	Virus passage history (b)	Evidence of Infection							
		CPE			PLAQUES			Growth Without CPE	
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	+/- (g)	
Duck embryo (PC)	Orig.					No plaques			
Vero (CL)					4		1.7(b)		
Vero (CL)	Vero 1				4		4.9		
Vero (CL)	Vero 4				3		5.3		

(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
Sentinel hamsters *	31		Ecuador
Culex (Mel) vomerifer	2		

* Heart muscle, skeletal muscle, brain, spleen, whole blood

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)	V1SM1	ic	Death	6	
Mice (nb)		ip	None		
Mice (nb)		sc			
Mice (wn)		ic			
Mice (wn)	V1SM2	ip	Death	4-6	

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log10/ml (b)		Incubation period (c)		Transmision 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)

Inclusion Bodies — Intranuclear

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

Suspected (Antibody only detected)

Section XIII - References

1. Calisher, C.H., et al. 1983. Am. J. Trop. Med. Hyg. 32:877-885.

Remarks