Virus Name: Inini	Abbreviation: INIV

Status
Possible Arbovirus

Select Agent
No

SALS Level
3

SALS Basis
Isufficient experience with virus; i.e., experience factor from SALS surveys was less than 500 in laboratory facilities with low biocontainment.

Other Information

Antigenic Group
Simbu

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
CaAn 1093a

Accession Number

Original Date Submitted
10/4/1948

Family
Bunyaviridae

Genus
Bunyavirus

Information From
J.P. Digoutte

Address
Institut Pasteur, B.P. 304, Cayenne, Guyane Francaise

Information Footnote
Reviewed by editor

Section II - Original Source

Isolated By (name)
J.P. Digoutte and G. Chatenay

Isolated at Institute
Institut Pasteur, Cayenne

Host Genus
Pteroglossus aracari

Species

Host Age/Stage
Adult

Sex
Male

Isolated From	Isolation Details
Whole Blood	

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
Collected by net

Collection Date
9/9/1973

Place Collected (Minimum of City, State, Country)
Inini (Exper. Station, Pasteur Inst.), French Guiana

Latitude
3° 39' N

Longitude
64° 2' W

Macrohabitat
Equatorial humid forest

Microhabitat
Bank of Inini river

Method of Storage until Inoculated
Liquid nitrogen 3 days, then Revco at -75dC

Footnotes

Section III - Method of Isolation

Inoculation Date
10/2/1973

Animal (Details will be in Section 6)
nb mice

Route Inoculated
ic and ip

Reisolation
Not tried

Other Reasons
First virus of this type in the laboratory

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) **5%**	After Treatment Titer **<2.0 dex**	Control Titer **6.5 dex**
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer

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 **5.8-6.8**	pH Optimum	
Temperature Range **Room temperature**	Temperature Optimum	

Remarks

Serologic Methods Recommended
CF, NT

Footnotes

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

CF test - homologous titer = 32/64.

Institut Pasteur Cayenne [3] :

CaAn 1093a antigen has been screened using NIH grouping fluids; it gave a positive reaction with Simbu group.

Yale Arbovirus Research Unit [2] :

In the Simbu group, CaAn 1093a antigen gave positive results at low titer with immune ascitic fluids to Mermet and Ingwavuma viruses, and it did not react with immune fluids to Oropouche, Utinga, Manzanilla, Buttonwillow, Akabane, Sabo, Sango, Sathuperi, Shamonda, Thimiri, and Yaba 7 viruses.
Institut Pasteur Cayenne [3] :

Complement-fixation test:

	Antigens		
Ascitic fluid	**CaAn 1093a**	**Manzanilla**	**Ingwavuma**
CaAn 1093a	32/64 *	<8/<8	<8/<8
Manzanilla	<8/<8	>256/64	64/32
Ingwavuma	8/32	128/64	128/64

* Maximum titer of ascitic fluid/optimum titer of antigen.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Blood (LV)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Newborn mice

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)	
Vero (CL)	SM 5				4	3 mm	6.7**		

** 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
Pteroglossus aracari (bird; blood)	1/4		French Guiana (1)

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)	SM 5	ic 0.02	Death	3	6.5
Mice (nb)		ip			
Mice (nb)		sc			
Mice (wn)		ic 0.03	Death	4	6.5
Mice (wn)		ip			
Mice (ad)		ip 0.1	Antibody		

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)
French Guiana

Suspected (Antibody only detected)

Section XIII - References

1. Digoutte, J.P. 1973. Rapport Annuel de l'Institut Pasteur de la Guyane Francaise, p. 18.
2. Shope, R.E. Personal communication.
3. Digoutte, J.P. 1975. Rapport Annuel de l'Institut Pasteur de la Guyane Francaise, pp. 29-31.

Remarks