Virus Name: Xiburema	Abbreviation: XIBV

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
Ungrouped

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
BeAr 362159

Accession Number

Original Date Submitted
4/13/1985

Family
Rhabdoviridae

Genus
Not listed

Information From
F.P. Pinheiro and Amelia P.A.T. Rosa

Address
Instituto Evandro Chagas, FSESP, Ministry of Health, CP-621, Belem, Para, Brazil

Information Footnote
Reviewed by editor

Section II - Original Source

Isolated By (name)
Gilberta Bensabath

Isolated at Institute
Instituto Evandro Chagas

Host Genus
Sabethes (Sbn) intermedius, pool of 40

Species

Host Age/Stage
Adult

Sex
Female

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod
Depleted

Time Held Alive before Inoculation
2-3 hours

Collection Method
Human bait

Collection Date
11/18/1977

Place Collected (Minimum of City, State, Country)
Xiburema, Sena Madureira, Acre, Brazil

Latitude
9° 3' S

Longitude
68° 39' W

Macrohabitat
Tropical rain forest

Microhabitat
Ground level

Method of Storage until Inoculated
Liquid nitrogen and freezer (-60dC)

Footnotes

Section III - Method of Isolation

Inoculation Date
7/23/1980

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation

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) **1:1000**	After Treatment Titer **1.5 dex**	Control Titer **1.6 dex**

Other (formalin, radiation)

Virion Morphology

Shape
Rhabdovirus morphology

Dimensions

Mean
nm

Range
nm

Measurement Method **EM**	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 + sonication**	**Goose**
pH Range	pH Optimum	
Temperature Range **RT, 37dC**	Temperature Optimum	

Remarks

Serologic Methods Recommended
CF, NT

Footnotes

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

This strain, when tested in Brazil, did not react by CF with the following immune fluids: Groups A, B, C, Guama, Capim, Bunyamwera, Phlebotomus fever, as well as Mirim, Oropouche, Utinga, Melao, Serra do Navio, Belem, Jurona, Tacaiuma, Piry, Cocal, Timbo, Chaco, Turlock, group Changuinola, Aruac, Triniti, Pacora, Lukuni, mouse encephalomyelitis, Pacui, Acara, rabies, EMC, mouse hepatitus virus, BeAr 263191, Jacareacanga, BeAn 306770, Sena Madureira, Santarem, Para, Cuiaba, Mojui dos Campos, Itupiranga, Mapuera, and herpes simplex virus.
In addition, the antigen did not treact by CF with NIH grouping fluids for groups A, B, C, Guama, Capim, California, Bunyamwera, Phelobotmus fever, Tacaribe, Kemerovo, VSV, Simbu, polyvalents 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, Bwamba, Congo, Patois, Quaranfil, Palyam, Anopheles A , and rabies/LCM.
At YARU, it was found to be unrelated by CF to the following viruses: Enseada, Pichinde, Aguacate, Cacao, Caimito, Chilibre, Connecticut, Frijoles, La Joya, New Minto, Rio Grande, Turuna, group Sakhalin, group Australia, Nariva, AG80-381, AG80-924, AG80-504, AG80-226, Boteke, Burg el Arab, Gomoka, Lebombo, Matariya, Malakal, Minnal, Nkolbisson, Okola, Wanowrie, Witwatersrand, Zinga, Hart Park, Mossuril, Charleville, Joinjakaka, Mt. Elgon bat, Navarro, Isfahan, DakA802, rabies, Lagos bat, Duvenhage, Chandipura, Sawgrass, Barur, Obodhiang, Bangoran, Flanders, Gray Lodge, Kamese, Kern Canyon, Keuraliba, kotonkan, TB4-222, Bahia Grande, 79V5816, 76V23524, Inini, Guaratuba, Arkonam, Puchong, Tataguine, and Yogue.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

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)	

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
Sabethes (Sbn) intermedius	1/10,750		Sena Madureira, Acre State, Brazil
Other Sabethes	0/10,441		
Other Culicidae	0/145,792		
Phlebotomines (female)	0/796		
Phlebotomines (male)	0/799		

Xiburema virus was not isolated from blood or viscera of the following animals captured in Sena Madureira area, 1976-1978: 252 marsupials, 945 rodents, 17 primates, 1 edentate, 63 bats, 173 reptiles, 617 wild birds, and 680 domestic birds.

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)	SMB 3	ic 0.02	Death	4.8	
mice (nb)		ip 0.02	Irregular deaths		
mice (nb)		sc			
mice (wn)		ic 0.02	Survived		
mice (wn)		ip 0.02	Survived, antibodies		
mice (nb)	SMB 5	ic 0.02	Death		8.0

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)
Brazil

Suspected (Antibody only detected)

Remarks