

Virus Name: Altamira		Abbreviation: ALTV
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 Changuinola		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation BeAr 264277	Accession Number	Original Date Submitted 8/6/1984
Family Reoviridae	Genus Orbivirus	
Information From F. Pinheiro and Amelia P.A.T. Rosa	Address Instituto Evandro Chagas, FSESP, Ministry of Health, CP-621, 66.000-Belem, Para, Brazil	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) F. Pinheiro and Amelia P.A.T. Rosa	Isolated at Institute Instituto Evandro Chagas	
Host Genus Lutzomyia sp. (1)	Species	Host Age/Stage Adult
Sex Female		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation 1 Hour		
Collection Method Human bait, night	Collection Date 7/30/1974	
Place Collected (Minimum of City, State, Country) Km. 46, Altamira-Itaituba, Para, Brazil		
Latitude 3° 12' S	Longitude 52° 12' W	
Macrohabitat Tropical rain forest	Microhabitat Ground	Method of Storage until Inoculated Liquid nitrogen and -60dC electrical freezer
Footnotes		

Section III - Method of Isolation

Inoculation Date
5/16/1975

Animal (Details will be in Section 6)
nb mice

Route Inoculated Intracerebral	Reisolation No
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Other Reasons
First strain of this virus isolated in our laborat

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 3.0 dex	Control Titer 4.2 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 ext. by sucrose-acetone + sonication

Goose

pH Range

pH Optimum

5.8-7.0

Temperature Range

Temperature Optimum

25dC-27dC

Remarks

****Green monkey erythrocytes also tested**

Serologic Methods Recommended

CF, NT

Footnotes

****Green monkey erythrocytes also tested**

Related by CF to Irituia and to other members of the Changuinola group as follows (tests performed at the Institute Evandro Chagas):

Antigen	Serum					
	Irituia	Gurupi	Ourem	Caninde	Jamanxi	Altamira
Irituia	16/16 ^a	16/16	>128/16	>128/16	>128/16	16/16
Gurupi	16/16	32/16	>128/16	>128/16	>128/16	16/16
Ourem	4/16	16/16	>128/64	>128/16	>128/16	16/16
Caninde	16/64	16/64	>128/64	>128/64	>128/64	16/16
Jamanxi	8/4	16/4	>128/4	>128/4	>128/16	16/16
Altamira	8/4	16/4	>128/4	>128/4	>128/16	16/16

^a Antibody titer/antigen titer

Results of neutralization tests performed in infant mice (ic route) at the Evandro Chagas Institute were as follows:

Virus	Ascitic Fluid or Serum					
	Irituia(5i) ^b	Gurupi (5i) ^b	Ourem (4i) ^b	Caninde (5i) ^c	Jamanxi (3i) ^c	Altamira (4i) ^c
Irituia	3.0 ^d				<1.0	0.8
Gurupi		2.5			<0.3	<0.3
Ourem			3.9		<1.0	<0.9
Caninde				3.0	0.8	0.4
Jamanxi	0.2	0.3	0	0.5	3.0	0
Altamira	1.1	1.2	1.0	1.0	0.9	<3.1

^b Ascitic fluid

^c Serum

^d LNI expressed in dex

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 +/- (g)
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	
Vero (CL)	SMB 4	6th	4+	6.5 ^e				

^e 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. tsted Test used	Country and region
Lutzomyia sp. (females)	1/35 (1,194 insects)		Km.46, Altamira -Itaituba, Para, Brazil
Lutzomyia sp. (males)	0/6 (282 insects)		

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) Para State, Brazil
Suspected (Antibody only detected)

Section XIII - References

1. Travassos da Rosa, A.P.A., et al. 1984. Intervirology 21:38-49.
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Remarks

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