

Virus Name: Garba		Abbreviation: GARV
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 Matariya		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation DakAnB 439a	Accession Number	Original Date Submitted 8/9/1984
Family Bunyaviridae	Genus Bunyavirus-like	
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, J. Moindrot	Isolated at Institute Bangui, Central African Republic	
Host Genus Corythornis cristata (bird)	Species	Host Age/Stage Adult
Sex Not Answered		
<u>Isolated From</u>	<u>Isolation Details</u>	
Whole Blood		
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method Collected by net	Collection Date 2/13/1970	
Place Collected (Minimum of City, State, Country) Garba, Central African Republic		
Latitude 9° 12' N	Longitude 20° 30' E	
Macrohabitat Dry savannah	Microhabitat	Method of Storage until Inoculated Liquid nitrogen until 25 Feb., then Revco at -75dC
Footnotes		

Section III - Method of Isolation

Inoculation Date
4/7/1970

Animal (Details will be in Section 6)
nb mice

Route Inoculated Intracerebral	Reisolation No
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Other Reasons
First virus of this type in 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) 1:1	After Treatment Titer 2.1 dex	Control Titer 4.5 dex
Lipid Solvent (chloroform)	After Treatment Titer 2.0 dex	Control Titer 5.0 dex
Lipid Solvent (deoxycholate) 0.2%	After Treatment Titer 2.0 dex	Control Titer 4.0 dex
Other (formalin, radiation)		

Virion Morphology

Shape Rhabdovirus (3)	Dimensions 180-190 x 50 nm	
Mean nm	Range nm	
Measurement Method EM (3)	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

Goose

pH Range

pH Optimum

6.0-7.0

Temperature Range

Temperature Optimum

4dC, RT, 37dC

Remarks

Serologic Methods Recommended

CF, NT

Footnotes

CF tests - Institut Pasteur (Dakar) [2] . DakAnB 439 gives positive results with the following immune fluids: Matariya and Burg el Arab. Cross-CF and neutralization tests with these viruses give the following results:

Antisera	CF Tests		
	DakAnB 439a	CF Antigens Matariya	Burg el Arab
DakAnB 439a	256/32 *	16/4	32/4
Matariya	8/32	128/16	16/4
Burg el Arab	64/32	8/4	256/16

* Antibody titer/antigen titer

Antisera	NT Indices		
	DakAnB 439a	Viruses Matariya	Burg el Arab
DakAnB 439a	> 3.4 **	0.4	0.2
Matariya	1.9	> 3.7	0.1
Burg el Arab	2.4	3.0	3.1

** LNI in dex

Results indicate that DakAnB 439a is a new virus related to Matariya and Burg el Arab.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
 Blood (LV), CNS (LV), heart (LV), liver (LV), spleen (LV)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
 Newborn mice

Cell system (a)	Virus passage history (b)	Evidence of Infection							Growth Without CPE +/- (g)
		CPE			PLAQUES				
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)		

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
Corythornis cristata	1/13		Central African Republic
Nectarinia pulchella (bird; brain)	1/16		

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) Central African Republic
Suspected (Antibody only detected)

Section XIII - References

1. Rapport Annuel de l'Institut Pasteur de Bangui. 1970. p. 50. 2. Robin, Y. Institut Pasteur de Dakar. Personal communication. 3. Calisher, C.H. et al. 1989. Intervirology. In Press.

Remarks

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