Virus Name: Kedougou	Abbreviation: KEDV

Status
Probable Arbovirus

Select Agent
No

SALS Level

SALS Basis

Other Information

Antigenic Group
B

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
ArD 14701

Accession Number

Original Date Submitted
3/5/1986

Family

Genus
Flavivirus

Information From
Yves Robin

Address
Institut Pasteur de Cayenne, BP 304, French Guyana

Information Footnote

Section II - Original Source

Isolated By (name)
Y. Robin and M. Cornet

Isolated at Institute
Institut Pasteur Dakar

Host Genus
Aedes minutus, pool of 67

Species

Host Age/Stage
Adults

Sex
Female

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
Human bait

Collection Date
6/26/1972

Place Collected (Minimum of City, State, Country)
Km 14 near Kedougou, Senegal

Latitude
12° 37' N

Longitude
12° 15' W

Macrohabitat
Sub-Sudanese savannah

Microhabitat
Forest gallery

Method of Storage until Inoculated
Liquid nitrogen, then deep freezer until inoculation

Footnotes

Section III - Method of Isolation

Inoculation Date
8/28/1972

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation
Not tried

Other Reasons
First virus of this type

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 **4.2 dex**	Control Titer **6.6 dex**
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer

Other (formalin, radiation)

Virion Morphology

Shape	Dimensions **< 220 nm**	
Mean nm	Range nm	
Measurement Method **Millipore filter**	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)
Yes	**SMB ext. by sucrose-acetone**	**Goose**
pH Range	pH Optimum	
5.7-6.8	**6.0 and 6.2**	
Temperature Range	Temperature Optimum	
	Room temperature	

Remarks
Titer = 40

Serologic Methods Recommended
CF, NT

Footnotes
Titer = 40

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

CF test: homologous titer = 64/128.

Insitut Pasteur Dakar

ArD 14701 antigen gave positive results with the following immune fluids: West Nile, Usutu and Dengue 3. Immune fluid to ARD 14701 gave negative results with all the anitgens.

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)
Vero (CL)	SM 4		No CPE			No Plaques		
LLC-MK2 (CL)			No CPE			No Plaques		
PS (CL)						No Plaques		
Ae. Albopictus (CL)			No CPE			No Plaques		
HEp-2 (CL)			No CPE			No Plaques		

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
Aedes minutus	2		Kedougou, Senegal
Aedes dalzieli	4		Kedougou, Senegal
Aedes tarsalis	5		Bozo/Bangui, Central African Republic
Human sera	1		Bangui, Central African Republic
Human sera		3/51 NT	Kedougou, Senegal (2)
Human sera		33/138 NT	Kedougou, Senegal (2)

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 4	ic 0.02	Death	5	6.2
"" (nb)		ip 0.03	Death	7-10	
"" (nb)		sc			
"" (wn)		ic 0.03	Antibodies		
"" (wn)		ip 0.10	Antibodies		

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)
Senegal, Central African Republic

Suspected (Antibody only detected)

Section XIII - References

1. Insitut Pasteur Dakar Annual Report. 1975.
2. Robin, Y., et.al. 1978. Ann. Microbio. (Inst. Oasteur) 129A: 239-244.

Remarks