

Virus Name: Kamese		Abbreviation: KAMV
Status Possible Arbovirus	Select Agent No	SALS Level 2
SALS Basis Results of SALS surveys and information from the Catalogue.		
Other Information		
Antigenic Group Mossuril		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation MP 6186	Accession Number	Original Date Submitted 10/31/1984
Family Rhabdoviridae	Genus Not listed	
Information From B.G. Kirya	Address East African Virus Research Institute, Box 49, Entebbe, Uganda	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) B.E. Henderson, P.M. Tukei (1)	Isolated at Institute Entebbe, Uganda	
Host Genus Culex (Culex) annulioris (pool of 58)	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 Nil		
Collection Method Human bait	Collection Date 2/2/1967	
Place Collected (Minimum of City, State, Country) Kamese Forest, Mawokota County, Uganda		
Latitude 0° 8' N	Longitude 32° 13' E	
Macrohabitat Swampy forest with broken canopy and dense undergrowth	Microhabitat Ground level	Method of Storage until Inoculated None
Footnotes		

Section III - Method of Isolation

Inoculation Date
2/2/1967

Animal (Details will be in Section 6)
nb mice

Route Inoculated
ic, ip and sc

Reisolation
Yes

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) 1:1	After Treatment Titer <1.5 dex	Control Titer 5.1 dex
Lipid Solvent (chloroform)	After Treatment Titer	Control Titer
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

Hemagglutination

Antigen Source

Erythrocytes (species used)

No

SMB ext. by sucrose-acetone

Goose

pH Range

pH Optimum

5.7-6.8

Temperature Range

Temperature Optimum

RT

Remarks

Serologic Methods Recommended

CF, NT

Footnotes

A CF screening test using a 1/10 dilution of MP 6186 antigen was performed against hyperimmune mouse antisera to the following arboviruses:

chikungunya	Bwamba
Middelburg	Simbu
Sindbis	Nyando
West Nile	Mossuril
yellow fever	Witwatersrand
Zika	Congo (Semunya)
Bunyamwera	

MP 6186 was also tested against reagents to 75 African arboviruses and broad group mouse ascitic fluids for arbovirus groups A, B, C, Guama, and California. All results were negative except with Mossuril. Cross CF and neutralization tests with Mossuril gave the following results:

Antiserum	CF Antigens		Antiserum	Neutralization Test Viruses	
	Kamese	Mossuril		Kamese	Mossuril
Kamese	160/40 *	80/40	Kamese	> 3.5 **	1.7
Mossuril	40/40	40/40	Mossuril	0.5	> 3.0

* Antiserum titer/antigen titer

** LNI expressed in dex

Results indicate that MP 6186 is a hitherto undescribed virus strain related to Mossuril.

Hart Park, Flanders, Mosqueiro, Mossuril and Kamese viruses cross-reacted by IFA, CF and NT and by EIA [5]. They form the Hart Park antigenic group.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Blood (M)

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
Culex (Cux) annulioris	1		Kamese Forest, Uganda
Man		7/135 NT	Uganda
Rodent		0/80 NT	
Culex pruina	1		Centr. Afr.Rep. (3, 4)
Culex tigripes	1		

Experimental host and age	Passage history and strain	Inoculation Route-Dose	Evidence of infection	AST (days)	Titer log ₁₀ /ml
Mice (nb)	SM 3	ic 0.02	Sickness and death	5	
Mice (nb)		ip 0.02	None		
Mice (nb)		sc			
Mice (wn)		ic 0.03	None		
Mice (wn)		ip 0.05	None, antibody detected		
Rhesus monkey	MP 6186 was inoculated into two adult rhesus monkeys, inoculum 25,000 LD ₅₀ . No virus was detected in venous blood inoculated in nb mice, and no antibodies were detected by NT up to the 28 pc day. MP 6186 does not appear to replicate in rhesus monkeys when inoculated by the sc route.				

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log ₁₀ /ml (b)		Incubation period (c)		Transmission by bite (d)		Assay of arthropod, log ₁₀ /ml (e)		
	Feeding	Injected	Days	°C	Host	Ratio	Whole	Organ	System

Section X - Histopathology

Character of lesions (specify host)

Encephalitis in mice

Inclusion Bodies

Intranuclear

Organs/Tissues Affected

Brain (LV)

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)

Uganda, Central African Republic

Suspected (Antibody only detected)

Section XIII - References

1. Henderson, B.E., et al. 1967. E. Afr. Virus Res. Inst. Report. No. 17:24-25.
2. Rapport Annuel de l'Institut Pasteur de Dakar. 1973. p. 12.
3. Rapport Annuel de l'Institut Pasteur de Bangui. 1972.
4. Rapport Annuel de l'Institut Pasteur de Bangui. 1974.
5. Calisher, C.H. et al. 1989. Intervirology. In Press.

Remarks