Virus Name: Tanjong Rabok	Abbreviation: TRV

Status
Possible Arbovirus

Select Agent
No

SALS Level
2

SALS Basis
Results of SALS surveys and information from the Catalogue.

Other Information

Antigenic Group
Tanjong Rabok

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
P9-87

Accession Number

Original Date Submitted
8/16/1984

Family
Not listed

Genus
Not listed

Information From
Albert Rudnick

Address
Hooper Foundation, University of California, San Francisco, CA 94143

Information Footnote
Reviewed by editor

Section II - Original Source

Isolated By (name)
Arbovirus Res. Unit, UC ICMR *

Isolated at Institute
Kuala Lumpur, Malaysia

Host Genus
Macaca nemestrina monkey, sentinel

Species

Host Age/Stage

Sex
Not Answered

Isolated From	Isolation Details
Whole Blood	

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
Bled from femoral vein

Collection Date
7/30/1968

Place Collected (Minimum of City, State, Country)
Tanjong Rabok, Selangor, Malaysia

Latitude
2° 9' N

Longitude
101° 24' E

Macrohabitat
Fresh-water peat swamp forest

Microhabitat
Forest canopy at 45' elevation

Method of Storage until Inoculated
Revco cabinet at -70dC

Footnotes

Section III - Method of Isolation

Inoculation Date
11/26/1968

Animal (Details will be in Section 6)
nb mice

Route Inoculated
ic and ip

Reisolation
Yes

Other Reasons

Homologous Antibody Formation by Source Animal
Yes

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) **1:100**	After Treatment Titer **<6.0 dex**	Control Titer **9.6 dex**

Other (formalin, radiation)

Virion Morphology

Shape	Dimensions **50-100 nm**	
Mean nm	Range nm	
Measurement Method **Graded Millipore filters**	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 **Yes**	Antigen Source **SMB ext. by sucrose-acetone**	Erythrocytes (species used) **Goose**
pH Range **6.0-6.4**	pH Optimum **6.2**	
Temperature Range **only 37dC tried**	Temperature Optimum	

Remarks
Low titer

Serologic Methods Recommended
HI, CF, PRNT

Footnotes
Low titer

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

Tanjong Rabok virus is a member of the Bakau antigenic group through its antigenic relationship with Telok Forest virus [2] .

Four units of Tanjong Rabok antigen failed to react by HI with hyperimmune mouse sera (5 inoculations) for the following: Bebaru, chikungunya, EEE, Getah, Mayaro, o'nyong-nyong, Ross River, Semliki Forest, Sindbis, WEE, dengue 1, 2, 3, and 4, Ilheus, JBE, MVE, Ntaya, SLE, Spondweni, Tembusu, Uganda S, Wesselsbron, yellow fever (17-D), Zika, Langat, Entebbe bat, Dakar bat, Batai, Bunyamwera, Wyeomyia, Caraparu, Marituba, Oriboca, Sathuperi, California, Anopheles A, Anopheles B, Turlock, Umbre, EHD (NJ), Bakau, Ketapang, Chandipura, Ganjam, Kaisodi, Lanjan, Silverwater, Chenuda, Seletar, Quaranfil, CTF, Nyamanini, Bhanja, Wanowrie, Keterah, Minnal, Coxsackie A-8, EMC, Theiler's, herpesvirus, pseudorabies, reovirus 3, Coxiella burneti, and Rickettsia mooseri. Its homologous serum titered 40.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Newborn mice, Vero, BHK-21 cell cultures

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)	SMB 7		CPE			Plaques	8.3 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. tested Test used	Country and region
Macaca nemestrina	1/many		Tanojong Rabok, Selangor State, Malaysia
Macaca nemestrina		0/32 NT	Peninsular Malaysia
M. fascicularis		7/40 NT	
Presbytis cristata		1/25 NT	
P. melalophos		0/3 NT	
Nycticebus coucang		0/14 NT	
Humans		10/248 NT	
Reptiles		0/44 NT	
Birds (several spp.)		8/53 NT	
Bats (several spp.)		2/35 NT	
Lomys horsfieldi (flying squirrel)		11/16 NT	
Other rodent spp.		5/42 NT	

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 8	ic 0.01	Illness and death	2	>9.0
Mice (nb)		ip			
Mice (nb)		sc 0.03	Illness and death	5	>9.0
Mice (wn)		ic			
Mice (wn)		ip			
Macaca fascicularis, (young adults)	Original monkey blood	sc 0.1	Viremia on day 5; development of HI and NT antibody		

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)
Peninsular Malaysia

Suspected (Antibody only detected)

Section XIII - References

1. Rudnick, A., et al. Unpublished. 1972.
2. Zeller, H. et al. 1989. II. Arch. Virol. Submitted.

Remarks

Two cases of febrile illness in Malaysia, one with hemororhagic manifestations, may be associated with this virus on the basis of HI antibody conversions in one test. Further studies are being done for confirmation.