

Virus Name: Zaliv Terpeniya		Abbreviation: ZTV
Status Possible Arbovirus	Select Agent No	SALS Level 2
SALS Basis Results of SALS surveys and information from the Catalogue.		
Other Information		
Antigenic Group Uukuniemi		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation LEIV-21C	Accession Number	Original Date Submitted 11/3/1984
Family Bunyaviridae	Genus Uukuvirus	
Information From D.K. Lvov et al	Address Ivanovsky Inst. of Virology, Gamaleya St., 16, Moscow D-98, USSR	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) D.K. Lvov and colleagues	Isolated at Institute Moscow, USSR	
Host Genus Ixodes (Ceratixodes) putus (pool of 10)	Species	Host Age/Stage Imago
Sex Female		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method Collected by hand	Collection Date 8/18/1969	
Place Collected (Minimum of City, State, Country) Tyuleny Island, Sea of Okhotsk, USSR		
Latitude 48° 30' N	Longitude 144° 30' E	
Macrohabitat Territory of seabird colonies	Microhabitat In the soil	Method of Storage until Inoculated Alive at 4dC in refrigerator
Footnotes		

Section III - Method of Isolation

Inoculation Date

10/9/1969

Animal (Details will be in Section 6)

nb mice

Route Inoculated

Intracerebral

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)	After Treatment Titer	Control Titer
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

No

Antigen Source

SMB ext. by sucrose-acetone

Erythrocytes (species used)

Goose

pH Range

5.7-7.0

pH Optimum

Temperature Range

4dC, 22dC

Temperature Optimum

Remarks

Serologic Methods Recommended

CF, NT

Footnotes

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

Zaliv Terpeniya antigen in the CF test did not react with MIAF to the following arboviruses: group A (polyvalent, Sindbis); group B (polyvalent, tick-borne enc., Jap. enc., West Nile, Tyulenyi); the Kemerovo group (Kemerovo, Baku); others (Congo, Sakhalin, Thogoto).

Antigenic Relationship to Uukuniemi Group:				
MIAF or Antigens/viruses	Antigen/virus of Zaliv Terpeniya		MIAF of Zaliv Terpeniya	
	CF	NT	CF	NT
Zal. Terpeniya	128	1.3	128	1.3
Uukuniemi	8/128	0/2.0	8/128	0/2.0
Manawa	8/			
Grand Arbaud	8/128			
CF, NT: heterologous/homologous.				
NT: LNI determined in duck fibroblast cell culture and given 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)			

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
Ixodes (Ceratiixodes) putus	2/160 pools (7,230 ticks)		Tyuleniy Island, Sakhalinsk reg., USSR
Ixodes (Ceratiixodes) putus	1/164 pools (9,800 ticks)		Ariy Kamen' rock, Commodore Islands, Kamchatsk region, USSR

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)		ic	Death	4-6	6.5	
Mice (nb)		ip	Death	6-8	4.0	
Mice (nb)		sc				
Mice (wn)		ic				
Mice (wn)		ip				

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log10/ml (b)		Incubation period (c)		Transmission 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) USSR
Suspected (Antibody only detected)

Section XIII - References

1. Lvov, D.K., et al. 1973. Archiv. ges. Virusforsch. 41:165-169.

Remarks

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