

<b>Virus Name: Mykines</b>		<b>Abbreviation: MYKV</b>
Status <b>Possible Arbovirus</b>	Select Agent <b>No</b>	SALS Level
SALS Basis		
Other Information		
Antigenic Group <b>Kemerove</b>		

**SECTION I - Full Virus Name and Prototype Number**

Prototype Strain Number / Designation <b>DenAr 12</b>	Accession Number	Original Date Submitted <b>12/25/1984</b>
Family <b>Reoviridae</b>	Genus <b>Orbivirus</b>	
Information From <b>Andrew J. Main</b>	Address <b>Yale Arbovirus Research Unit; P.O. Box 3333; New Haven, Connecticut 06510; USA</b>	
Information Footnote		

**Section II - Original Source**

Isolated By (name) <b>Andrew J. Main</b>	Isolated at Institute <b>YARU</b>	
Host Genus <b>Ixodes (Ceratiixodes) uriae (= I. (C.) putus)</b>	Species	Host Age/Stage <b>5 adults</b>
Sex <b>Female</b>		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod <b>Engorged</b>	
Time Held Alive before Inoculation <b>Seven days</b>		
Collection Method <b>By hand</b>	Collection Date <b>8/5/1974</b>	
Place Collected (Minimum of City, State, Country) <b>Mykines, Faeroe Islands, Denmark</b>		
Latitude <b>62° 5' N</b>	Longitude <b>7° 30' W</b>	
Macrohabitat <b>Common puffin (Fratercula arctica) colony</b>	Microhabitat	Method of Storage until Inoculated <b>Held alive</b>
Footnotes		

**Section III - Method of Isolation**

Inoculation Date  
**8/13/1974**

Animal (Details will be in Section 6)  
**nb mice**

Route Inoculated <b>Intracerebral</b>	Reisolation <b>No</b>
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Other Reasons

Homologous Antibody Formation by Source Animal

Test(s) Used

Footnotes

**Section IV - Virus Properties**

Physicochemical  
**RNA, Double Strand**

Pieces (number of genome segments) <b>10</b>	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 **5.8-7.4**      pH Optimum

Temperature Range **4dC, 22dC, 37dC**      Temperature Optimum

Remarks

Serologic Methods Recommended **CF, NT**

Footnotes

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

Antibodies or Antigens	Mykines (DenAr 12)			
	Antigen		Ascitic Fluid	
	CF Ht/Ho	NT Ht/Ho	CF Ht/Ho	NT Ht/Ho
Mykines (DenAr 7)	32/32	2.4/1.2	64/256	>1.1/2.6
Mykines (DenAr 8)	32/16	2.2/2.1	4/256	0.0/2.6
Mykines (DenAr 10)	256/512	1.1/2.6	1024/256	3.0/2.6
Tindholmur (DenAr 2)	64/32	0.4/2.4	32/256	0.5/2.6
Tindholmur (DenAr 3)	32/8	0.2/1.8	32/256	0.3/2.6
———— (FinV-808)	512/1024		64/256	
———— (FinV-873)	128/256		32/256	
———— (FinV-962)	64/64		8/256	
Cape Wrath (ScotAr 20)	64/64	0.0/2.6	32/256	0.9/2.6
Great Island (CanAr 41)	64/128	0.0/2.7	32/256	0.5/2.6
Bouline (CanAr 14)	128/128	0.0/2.0	8/256	<1.1/2.6

Dauville (CalAr 14)	128/128	0.0/3.0	8/256	<4/128
Yaquina Head (RML-15)	32/128	0.0/3.3	32/256	0.3/2.6
Okhotskiy (LEIV 287ka)	32/64	0.0/3.3	16/256	0.2/2.6
Nugget (AusMI-14847)	128/256	0.0/3.6	64/256	0.3/2.6
Kemerovo (R-10)	64/512	0.3/>1.5	16/256	0.0/2.6
Tribec (Original)	64/128	0.0/2.7	16/256	0.0/2.6
Lipovnik (Lip 91)	32/128	0.0/4.2	4/256	0.0/2.6
Chenuda (EgAr 1152)	<4/128		<4/256	
Baku (LEIV 46A)	16/512		<4/256	
Mono Lake (CalAr 861)	16/256		<4/256	
Huacho (CalAr 883)	<4/128		<4/256	
Wad Medani (EgAr 492)	<4/128		<4/256	

NT: LNI 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							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
Ixodes uriae	2/58		Tindholmur, Faeroe Islands, Denmark
Ixodes uriae	2/61		Mykines, Faeroe Islands, Denmark
Ixodes uriae	0/17		Nolsoy, Faeroe

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)	DenAr 12, SM 3-5	ic	Paralysis, death	3	7.0-7.6
Mice (nb)		ip			
Mice (nb)		sc			
Mice (wn)		ic			
Mice (wn)		ip			

**Section IX - Experimental Arthropod Infection and Transmission**

Arthropod species & virus source(a)	Method of Infection log <sub>10</sub> /ml (b)		Incubation period (c)		Transmission by bite (d)		Assay of arthropod, log <sub>10</sub> /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)

**Faeroe Islands, Denmark**

Suspected (Antibody only detected)

**Section XIII - References**

1. Main, A.J. 1978. J. Med. Ent. 15:11-14.

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