

Virus Name: Ndelle		Abbreviation: NDEV
Status Possible Arbovirus	Select Agent No	SALS Level
SALS Basis		
Other Information		
Antigenic Group Ungrouped		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation AnY 1444	Accession Number	Original Date Submitted 12/19/1985
Family	Genus Orbivirus	
Information From G. LeGonidec	Address Insitut Pasteur Outre-Mer 25, Rue du Dr Roux,75724 Paris Cedex 15	
Information Footnote		

Section II - Original Source

Isolated By (name) G. LeGonidec and A. Richenbach	Isolated at Institute Institut Pasteur du Cameroon, Yaounde	
Host Genus Mus minutoides (musculoides)	Species	Host Age/Stage
Sex Not Answered		
<u>Isolated From</u>	<u>Isolation Details</u>	
Organs/Tissues	Liver, brain	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method By trapping	Collection Date 2/24/1974	
Place Collected (Minimum of City, State, Country) Ndelle, Cameroon		
Latitude 4° 1' N	Longitude 12° 33' E	
Macrohabitat Semi-deciduous rain forest	Microhabitat	Method of Storage until Inoculated Liquid nitrogen at -65dC
Footnotes		

Section III - Method of Isolation

Inoculation Date
8/5/1985

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation
Yes

Other Reasons

Homologous Antibody Formation by Source Animal
Not tested

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 6.6 dex	Control Titer 6.6 dex
Lipid Solvent (chloroform)	After Treatment Titer 6.6 dex	Control Titer 6.6 dex
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer
Other (formalin, radiation)		

Virion Morphology

Shape Orbivirus (2)	Dimensions <200nm	
Mean nm	Range nm	
Measurement Method Millipore filter: After filtration titer=6.6dex; c	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
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pH Range 5.7-5.8	pH Optimum
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Temperature Range	Temperature Optimum
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Remarks

Serologic Methods Recommended
CF, NT

Footnotes

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

Institut Pasteur Dakar. J.P. Digoutte and G. Heme.

CF-homologous titer = 256/64.

Immune ascitic fluid and/or newborn mouse brain antigen failed to react with 205 different virus strains of the Arbovirus Reference Center.

Results indicate that AnY 1444 is apparently a new virus.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Salivary gland (LV)

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)	
BHK-21 (CL)			++	6.7				

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
Mus minutoides (musculoides)	1		Ndelle, Cameroon (1)

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 log ₁₀ /ml
mice (nb)	SM 7	ic 0.02	Death	6-7	7.3
"" (nb)		ip 0.03	Death		
"" (nb)		sc			
"" (wn)		ic 0.02	Paralysis; death of 1/8	8	
"" (wn)		ip 0.1	Paralysis; death of 1/6	8	

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)

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) Cameroon
Suspected (Antibody only detected)

Section XIII - References

1. Institut Pasteur Dakar Annual Report. 1975. 2. S.P. Pattyn. Personal communication. 1985.

Remarks

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