

| | | |
|--|---------------------------|---------------------------|
| Virus Name: Inini | | Abbreviation: INIV |
| Status Possible Arbovirus | Select Agent No | SALS Level 3 |
| SALS Basis Insufficient experience with virus; i.e., experience factor from SALS surveys was less than 500 in laboratory facilities with low biocontainment. | | |
| Other Information | | |
| Antigenic Group Simbu | | |

SECTION I - Full Virus Name and Prototype Number

| | | |
|--|---|---|
| Prototype Strain Number / Designation CaAn 1093a | Accession Number | Original Date Submitted 10/4/1948 |
| Family Bunyaviridae | Genus Bunyavirus | |
| Information From J.P. Digoutte | Address Institut Pasteur, B.P. 304, Cayenne, Guyane Francaise | |
| Information Footnote Reviewed by editor | | |

Section II - Original Source

| | | |
|--|---|--|
| Isolated By (name) J.P. Digoutte and G. Chatenay | Isolated at Institute Institut Pasteur, Cayenne | |
| Host Genus Pteroglossus aracari | Species | Host Age/Stage Adult |
| Sex Male | | |
| <u>Isolated From</u> | <u>Isolation Details</u> | |
| Whole Blood | | |
| Signs and Symptoms of Illness | Arthropod | |
| Time Held Alive before Inoculation | | |
| Collection Method Collected by net | Collection Date 9/9/1973 | |
| Place Collected (Minimum of City, State, Country) Inini (Exper. Station, Pasteur Inst.), French Guiana | | |
| Latitude 3° 39' N | Longitude 64° 2' W | |
| Macrohabitat Equatorial humid forest | Microhabitat Bank of Inini river | Method of Storage until Inoculated Liquid nitrogen 3 days, then Revco at -75dC |
| Footnotes | | |

Section III - Method of Isolation

Inoculation Date
10/2/1973

Animal (Details will be in Section 6)
nb mice

| | |
|--------------------------------------|---------------------------------|
| Route Inoculated ic and ip | Reisolation Not tried |
|--------------------------------------|---------------------------------|

Other Reasons
First virus of this type in the laboratory

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) 5% | After Treatment Titer <2.0 dex | Control Titer 6.5 dex |
| 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
5.8-6.8

Temperature Range Temperature Optimum
Room temperature

Remarks

Serologic Methods Recommended
CF, NT

Footnotes

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

CF test - homologous titer = 32/64.

Institut Pasteur Cayenne [3] :

CaAn 1093a antigen has been screened using NIH grouping fluids; it gave a positive reaction with Simbu group.

Yale Arbovirus Research Unit [2] :

In the Simbu group, CaAn 1093a antigen gave positive results at low titer with immune ascitic fluids to Mermet and Ingwavuma viruses, and it did not react with immune fluids to Oropouche, Utinga, Manzanilla, Buttonwillow, Akabane, Sabo, Sango, Sathuperi, Shamonda, Thimiri, and Yaba 7 viruses.

Institut Pasteur Cayenne [3] :

Complement-fixation test:

| Ascitic fluid | Antigens | | |
|----------------------|-------------------|-------------------|------------------|
| | CaAn 1093a | Manzanilla | Ingwavuma |
| CaAn 1093a | 32/64 * | <8/<8 | <8/<8 |
| Manzanilla | <8/<8 | >256/64 | 64/32 |
| Ingwavuma | 8/32 | 128/64 | 128/64 |

* Maximum titer of ascitic fluid/optimum titer of antigen.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Blood (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) | |
| Vero (CL) | SM 5 | | | | 4 | 3 mm | 6.7** | |

** Expressed in 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 |
|---|------------------------------|---|-----------------------|
| Pteroglossus aracari (bird; blood) | 1/4 | | French Guiana (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 5 | ic 0.02 | Death | 3 | 6.5 |
| Mice (nb) | | ip | | | |
| Mice (nb) | | sc | | | |
| Mice (wn) | | ic 0.03 | Death | 4 | 6.5 |
| Mice (wn) | | ip | | | |
| Mice (ad) | | ip 0.1 | Antibody | | |

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) French Guiana |
| Suspected (Antibody only detected) |

Section XIII - References

| |
|--|
| 1. Digoutte, J.P. 1973. Rapport Annuel de l'Institut Pasteur de la Guyane Francaise, p. 18. 2. Shope, R.E. Personal communication. 3. Digoutte, J.P. 1975. Rapport Annuel de l'Institut Pasteur de la Guyane Francaise, pp. 29-31. |
|--|

Remarks

| |
|--|
| |
|--|