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|--|---------------------------|--------------------------|
| Virus Name: Aransas Bay | | Abbreviation: ABV |
| 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 Upolu | | |

SECTION I - Full Virus Name and Prototype Number

| | | |
|---|---|---|
| Prototype Strain Number / Designation RML 65660-8 | Accession Number | Original Date Submitted 9/19/1984 |
| Family Bunyaviridae | Genus Bunyav-like | |
| Information From Conrad E. Yunker | Address Rocky Mountain Laboratories, Hamilton, MT 59840 | |
| Information Footnote Reviewed by editor | | |

Section II - Original Source

| | | |
|---|---|--|
| Isolated By (name) C.E. Yunker et al. (1) | Isolated at Institute Rocky Mountain Laboratories | |
| Host Genus Ornithodoros capensis | Species | Host Age/Stage 5 adults |
| Sex Female | | |
| <u>Isolated From</u> | <u>Isolation Details</u> | |
| Signs and Symptoms of Illness | Arthropod Depleted, Gravid | |
| Time Held Alive before Inoculation 5 weeks | | |
| Collection Method By hand | Collection Date 5/25/1975 | |
| Place Collected (Minimum of City, State, Country) False Live Oak Point Island, Aransas Co., Texas | | |
| Latitude 28° 13' N | Longitude 96° 48' W | |
| Macrohabitat Offshore Island | Microhabitat Abandoned brown pelican nests | Method of Storage until Inoculated Held alive at 27° C |
| Footnotes | | |

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-actone

Goose

pH Range

pH Optimum

6.0 - 7.0

Temperature Range

Temperature Optimum

4°, 22°, and 37° C

Remarks

Serologic Methods Recommended

CF, NT, and indirect immunofluorescence

Footnotes

The viral antigen did not react in CF tests with 20 mouse ascitic fluids made from the following argasid tick viruses: Farallon (AR846), Hughes (Orig.), Punta Salinas (AR888), Raza (5/8/64), Sapphire II (strain 14), Soldado (6446), Zirqa (POR7866), all of the Huges serogroup; Baku (Liev 46A), Chenuda (AR1170), Huacho (AR883), Sixgun City (strain 10), all of the Kemerovo serogroup; Midway (RML47153), Nyamanini (AR1304) of the Nyamanini serogroup; Johnston Atoll (RML39579), Quaranfil (AR1113), of the Quaranfil serogroup; Bandia (AP/A611), Qalyub (AR370), of the Qalyub serogroup; and Chobar Gorge (701700-8), Matucare (21343), both serologically ungrouped.

Related by CF test to Upolu virus, but clearly distinguishable by plaque reduction NT and indirect immunofluorescence tests, as follows:

| Virus or Antigen | Hyperimmune Mouse Ascitic Fluid | | | | | | | | |
|------------------|----------------------------------|-------|---------|-------|---|-------|---|------------|----------|
| | Complement-fixation ^a | | | | Indirect immuno-fluorescence ^b | | Virus-detection neutralization ^c | | |
| | Test 1 | | Test 2 | | 65660-8 | C5581 | Control | NI 65660-8 | NI C5881 |
| | 65660-8 | C5581 | 65660-8 | C5581 | 65660-8 | C5581 | | | |
| Aransas Bay | | | | | | | | | |
| (65660-8) | 128 | 16 | | | 64 | 8 | 8.1 | >6.1 | 0.1 |
| (65660-42) | | | 32 | 4 | | | | | |
| Upolu(C5581) | 64 | 64 | 32 | 32 | 8 | 256 | 8.2 | 2.0 | 4.8 |

^a Reciprocal of serum titer at optimal dilution of antigen; lowest dilution tested = 1:4.

^b Reciprocal of highest serum dilution giving a positive reaction.

^c Control: Virus titer, in Vero cell plaque-forming units/ml, after incubation with normal serum. NI: Neutralization index (dex reduction of Vero cell plaque titer after incubation of virus/antiserum mixture).

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Vero cell cultures

| 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) Dermacentor andersoni(PC) | Vero 2, SMB 6 | 13 | 3+ | 8.7 * | 5-7 | 2-4mm | 8.1 * | + |

* 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 |
|--|---------------------------|---|---|
| Ornithodoros capensis | 3/163 pools (544 ticks) | | Aransas and Calhoun Counties, Texas, USA. |

Section XII - Geographic Distribution

Known (Virus detected)

Texas, USA

Suspected (Antibody only detected)

Section XIII - References

1. Yunker, C.E., et al. 1979. J. Med. Ent. 16:453-460

Remarks