

<b>Virus Name: Petevo</b>		<b>Abbreviation: PETV</b>
Status <b>Possible Arbovirus</b>	Select Agent <b>No</b>	SALS Level
SALS Basis		
Other Information		
Antigenic Group <b>Palyam</b>		

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

Prototype Strain Number / Designation <b>ArB 2032</b>	Accession Number	Original Date Submitted <b>12/19/1985</b>
Family <b>Not listed</b>	Genus <b>Orbivirus</b>	
Information From <b>J.F. Saluzzo</b>	Address <b>Institut Pasteur, BP 220 Dakar, Senegal</b>	
Information Footnote		

**Section II - Original Source**

Isolated By (name) <b>J.F. Saluzzo</b>	Isolated at Institute <b>Bangui, Central African Republic</b>	
Host Genus <b>Amblyomma variegatum, pool of 20</b>	Species	Host Age/Stage <b>Adults</b>
Sex <b>Male</b>		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation <b>2-3 hours</b>		
Collection Method <b>Removed by hand from cattle</b>	Collection Date <b>7/1/1978</b>	
Place Collected (Minimum of City, State, Country) <b>Bangui, Central African Republic</b>		
Latitude <b>4° 22' N</b>	Longitude <b>18° 35' E</b>	
Macrohabitat <b>Large town</b>	Microhabitat <b>Slaughterhouse</b>	Method of Storage until Inoculated <b>Kept alive until processed.</b>
Footnotes		

**Section III - Method of Isolation**

Inoculation Date  
**7/1/1978**

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

Route Inoculated  
**Intracerebral**

Reisolation  
**No**

Other Reasons  
**First virus of this type in 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 <b>5.2 dex</b>	Control Titer <b>6.0 dex</b>
Lipid Solvent (chloroform)	After Treatment Titer <b>4.8 dex</b>	Control Titer <b>5.5 dex</b>
Lipid Solvent (deoxycholate)	After Treatment Titer <b>4.9 dex</b>	Control Titer <b>6.0 dex</b>
Other (formalin, radiation)		

**Virion Morphology**

Shape	Dimensions <b>&lt;220 nm</b>	
Mean nm	Range nm	
Measurement Method <b>Millipore filter: After filtration titer = 5.5 de</b>	Surface Projections/Envelope	Nucleocapsid Dimensions, Symmetry

### Morphogenesis

Site of Constituent Formation in Cell

Site of Virion Assembly

Site of Virion Accumulation

Inclusion Bodies

Other

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### 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 and NT**

Footnotes

Insitut Pasteur Dakar.

CF tests. Homologous titer = 128/8.

ArB 2032 gives positive results with the following immune ascitic fluids: Abadina, Kasba, Vellore, Palyam d'Aguilar, Ark 502.

Neutralization tests with these viruses gave the following results by the plaque-reduction technique on Vero cells.

ANTISERUM	VIRUS						
	Petevo	Abadina	Kasba	Vellore	Palyam	d'Aguilar	K502
Petevo (ArB 2032)	512 *	0	0	0	0	0	0
Abadina	0	1024	0	0	0	0	0
Kasba	0	128	256	0	0	0	0
Vellore	0	0	0	0	0	0	0
Palyam	0	0	0	0	512	0	0
d'Aguilar	0	0	0	0	0	512	0
K 502	0	0	0	0	128-256	0	256-512

\* Reciprocal of highest antiserum dilution producing  $\geq 90\%$  plaque-reduction in Vero cells cultures; 0 =  $<16$ .

Results indicate that ArB 2032 is apparently a new virus.

**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)	
Vero (CL)	SM 5				5-6	2mm	5.0 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
Amblyomma variegatum	1*		Central African Republic (1)
Cattle		11/42	Central African Republic
Sheep		0/9	
Rabbit		0/20	
Monkey		0/10	
Man		0/69	

\* More than 2.500 pools of several species of ticks were collected and tested in the Central African Republic without isolation of another virus corresponding to ArB 2032.



**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) <b>Central African Republic</b>
Suspected (Antibody only detected)

**Section XIII - References**

1. Saluzzo, J. F. Et.al. 1982. Ann. Virol. (Institut Pasteur) 133E:215-221.
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**Remarks**

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