Template for Taxonomic Proposal to the ICTV Executive Committee
Creating Species in an existing genus

Code† **2007.085B.04** To designate the following as species in the genus:

Globulovirus

belonging to the family° : ***Globuloviridae***

Thermoproteus tenax spherical virus 1

† Assigned by ICTV officers
° leave blank if inappropriate or in the case of an unassigned genus

Author(s) with email address(es) of the Taxonomic Proposal

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Old Taxonomic Order

Order
Family ***Globuloviridae***
Genus ***Globulovirus***
Type Species ***Pyrobaculum spherical virus***
Species in the Genus ***Pyrobaculum spherical virus***
Tentative Species in the Genus
Unassigned Species in the family

New Taxonomic Order

Order
Family ***Globuloviridae***
Genus ***Globulovirus***
Type Species ***Pyrobaculum spherical virus***
Species in the Genus ***Pyrobaculum spherical virus***
Thermoproteus tenax spherical virus 1

Tentative Species in the Genus **none**
Unassigned Species in the family **none**

ICTV-EC comments and response of the SG

Species demarcation criteria in the genus

Demarcation criteria between the species in the genus is the host range and nucleotide sequence of the genome.

Argumentation to justify the designation of new species in the genus

Thermoproteus tenax spherical virus 1 differs from the other known member of the genus *Globulovirus, Pyrobaculum spherical virus,* by host range, virion size, as well as by size and nucleotide sequence of the genome. It replicates in hyperthermophilic archaeeon *Thermoproteus tenax*, wheas for other member of the genus infects hyperthermophilic archaeon from the genus *Pyrobaculum.* Among 38 putative genes of *Thermoproteus tenax spherical virus 1,* only 15 genes have homologs on the genome of the *Pyrobaculum spherical virus*.

List of created Species in the genus

Thermoproteus tenax spherical virus 1

References

Ahn, D. G., Kim, S. I., Rhee, J. K., Kim, K. P., Pan, J. G., Oh, J. W. 2006 TTSV1, a new virus-like particle isolated from the hyperthermophilic crenarchaeote *Thermoproteus tenax*. *Virology*, 351, 280-290.

Annexes:

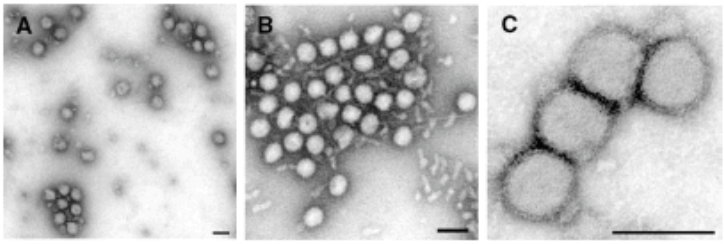

Fig. 1. Transmission electron microscopy of TTSV1. Virus particles obtained by PEG precipitation of a culture supernatant (A), by ultracentrifugation of a culture supernatant (B), and by ultracentrifugation in a sucrose density gradient were stained with 2% uranyl acetate and observed by a transmission electron microscope. Scale bars indicate 100 nm.