

OPTIPREP™ VIRUS APPLICATION SHEET INDEX

- ◆ All of the general information on gradient production and analysis plus pre-gradient virus concentration are contained in **Application Sheets V01-V05**.
- ◆ **V06** summarizes the range of virus purification strategies
- ◆ All the virus gradient protocols (**V07-V36**) have been listed according to the seven groups of the Baltimore Virus Classification scheme.
- ◆ Within each group, Families (sometimes preceded by the Order name), and where appropriate Subfamilies, are listed alphabetically in italics. Within each Family or Subfamily individual viruses are also listed alphabetically.
- ◆ In some cases more than one Application Sheet for a specific virus type may be provided, if significantly different practical strategies are available.
- ◆ Protocols for one particular virus in a Group may be applicable to other viruses in the same group with a similar overall structure and composition, but this can only be determined experimentally.
- ◆ **Yeast retrotransposons**, although not part of the Baltimore Virus Classification system, are considered similar in structure to retroviruses. They are included in Group VI listings.
- ◆ **Plant Virus (V37)** and **Bacteriophage (V38)** Application Sheets can be accessed from this index after the entry for Group VII viruses.
- ◆ **To access the Application Sheet(s) referred to in the list: return to the 2020Virapp file and select the appropriate V number.**

1. Gradient preparation, virus concentration and gradient analysis

Preparation of density gradient solutions	[Application Sheet V01]
Preparation of discontinuous and continuous gradients	[Application Sheet V02]
Preparation of self-generated gradients	[Application Sheet V03]
Harvesting gradients	[Application Sheet V04]
Analysis of gradients	[Application Sheet V05]

2. Virus purification strategies (a review)	[Application Sheet V06]
--	-------------------------

3. Virus purification

Group I (ds)DNA viruses

Adenoviridae

Adenovirus	[Application Sheet V07]
Helper-dependent virus, separation from	[Application Sheet V07]

Asfaviridae

African swine fever virus	[Application Sheet V09]
---------------------------	-------------------------

Baculoviridae

Baculovirus vectors	[Application Sheet V08]
---------------------	-------------------------

Herpesviridae

Cytomegalovirus	
Self-generated gradient	[Application Sheet V08]
Pre-formed gradient	[Application Sheet V09]
Epstein-Barr virus	
Self-generated gradient	[Application Sheet V08]
Pre-formed gradient	[Application Sheet V09]

Herpesviridae (contd)

Herpes simplex virus	
Self-generated gradient	[Application Sheet V08]
Pre-formed gradient	[Application Sheet V09]
Herpes virus vectors	[Application Sheet V08]
Rhadinovirus	[Application Sheet V09]

Iridoviridae

Iridovirus	[Application Sheet V13]
------------	-------------------------

Papillomaviridae

Human papillomavirus	[Application Sheet V10]
----------------------	-------------------------

Phycodnaviridae

Chlorovirus	[Application Sheet V13]
-------------	-------------------------

Polyomaviridae

BK virus	[Application Sheet V11]
JC virus	[Application Sheet V11]
Merkel cell carcinoma virus	[Application Sheet V11]
Simian virus 40 (SV40)	[Application Sheet V11]

Poxviridae

Molluscipoxvirus	[Application Sheet V12]
Vaccinia virus	[Application Sheet V12]

Group II (ss)DNA viruses

Anelloviridae

Torque teno virus	[Application Sheet V15]
-------------------	-------------------------

Parvoviridae

Densovirinae

Dependovirus	
Avian adeno-associated virus	[Application Sheet V14]
Recombinant adeno-associated virus	[Application Sheet V14]

Parvovirinae

Minute virus of mice	[Application Sheet V15]
Parvovirus	[Application Sheet V16]

Group III (ds)RNA viruses

Reoviridae

Birnavirus

Espirito Santo virus	[Application Sheet V17]
----------------------	-------------------------

Sedoreovirinae

Rotavirus	[Application Sheet V17]
Seadornavirus	[Application Sheet V17]

Spinareovirinae

Dinovernavirus	[Application Sheet V17]
----------------	-------------------------

Group IV ((+)ss)RNA viruses

Caliciviridae

Lagovirus

Rabbit haemorrhagic fever virus	[Application Sheet V18]
---------------------------------	-------------------------

Norovirus

Norwalk virus	[Application Sheet V18]
---------------	-------------------------

Flaviviridae

Flavivirus

Dengue virus [Application Sheet V19]

West Nile virus [Application Sheet V19]

Yellow fever virus [Application Sheet V19]

Hepacivirus

Hepatitis C virus

Pre-formed gradient [Application Sheet V19]

Self-generated [Application Sheet V20]

Hepevirus

Hepatitis E virus [Application Sheet V19]

Pestivirus

Bovine diarrhea virus [Application Sheet V19]

Nidovirales - Arteriviridae

Porcine reproductive & respiratory syndrome virus [Application Sheet V21]

Nidovirales - Coronaviridae

SARS coronavirus [Application Sheet V21]

Togaviridae

Alphavirus

Chikungunya virus [Application Sheet V22]

Semliki Forest virus [Application Sheet V22]

Sindbis virus [Application Sheet V22]

Venezuelan equine encephalitis virus [Application Sheet V22]

Rubivirus

Rubella virus [Application Sheet V22]

Tombusviridae

Dianthovirus

Red clover mosaic virus [Application Sheet V22]

Group V ((-)ss) RNA viruses

Arenaviridae

Arenavirus

Lassa virus [Application Sheet V23]

Tacaribe virus [Application Sheet V23]

Bunyaviridae

Hantavirus

Hantavirus [Application Sheet V24]

Orthobunyavirus

Bunyamwera virus [Application Sheet V24]

Phlebovirus

Rift valley fever virus [Application Sheet V24]

Filoviridae

Ebola virus [Application Sheet V25]

Orthomyxoviridae

Influenza virus [Application Sheet V26]

Rhabdoviridae

Lyssavirus

Rabies virus [Application Sheet V27]

Vesiculovirus

Vesicular stomatitis virus [Application Sheet V27]

Paramyxoviridae

Paramyxovirinae

Avulavirus

Newcastle disease virus

[Application Sheet V28]

Morbillivirus

Measles virus

[Application Sheet V28]

Respirovirus

Swine paramyxovirus

[Application Sheet V28]

Pneumovirinae

Human respiratory syncytial virus

[Application Sheet V28]

Group VI (ss)RNA-RT viruses

Retroviridae

Alpharetrovirus

Rous sarcoma virus

[Application Sheet V29]

Betaretrovirus

Mason-Pfizer monkey virus (Simian retrovirus)

[Application Sheet V30]

Deltaretrovirus

Human T cell lymphotropic virus

[Application Sheet V31]

Gammaretrovirus

Moloney murine leukaemia virus

[Application Sheet V33]

Murine oncornavirus

[Application Sheet V32]

Lentivirus

Feline immunodeficiency virus

[Application Sheet V34]

Human immunodeficiency virus

[Application Sheet V34]

Spumaretroviridae

Spumaviridae

Foamy virus

[Application Sheet V35]

Yeast retrotransposons

[Application Sheet V37]

Group VII (ds)RNA-RT

Hepadnaviridae

Orthohepadnavirus

Hepatitis B

[Application Sheet V36]

Plant viruses

[Application Sheet V37]

Bacteriophages

[Application Sheet V38]

OptiPrep™ Virus Application Sheet Index February 2020