

Index

A

Adenovirus 1, 3, 86
ATPase 3, 7, 8, 14-20, 24, 29, 30, 40, 41,
43-45, 47, 51-53, 55, 59, 67, 68, 83, 85,
90, 92, 93, 95, 97, 102-104, 108-110,
143

B

Bacillus subtilis 89, 99, 102, 103, 104
Bacteriophage 1-8, 15, 28, 40, 41, 50, 54,
59-61, 63-74, 80-82, 89, 94, 96-99, 102,
103, 117, 127, 130, 135, 141, 142
Bacteriophage $\phi 6$ 4, 117
Bacteriophage $\phi 29$ 3, 69, 73, 96
Bacteriophage λ 4, 5, 6, 7, 8, 68, 72, 127
Bacteriophage λ cos 8
Bacteriophage genetics 60
Bacteriophage P22 80-82, 96, 98
Bacteriophage T4 15, 28, 40-42, 46, 48-51,
53, 54, 60, 89
Biological motor 2, 29, 67

C

Capsid 1-11, 14, 20, 21, 24, 29, 30, 32, 33,
40, 41, 50, 51, 59-62, 64-73, 75, 80-82,
84, 85, 89-91, 95-97, 102-106, 108, 111,
117-119, 121-124, 126, 128, 130, 131,
135-142, 144-146
Capsid protein 1, 2, 6, 20, 24, 30, 33, 40, 41,
50, 51, 70, 89-91, 96, 103, 119, 137,
141, 144, 145
Capsid structure 2, 8, 50, 62, 69, 91, 95, 96,
122
Concatemer 1-3, 5-11, 21-25, 27, 30-33, 40,
41, 46, 47, 50, 53-55, 59-62, 64, 66, 67,
73-75, 81-83, 85, 89, 91, 92, 94, 96, 98,
99, 135, 137, 138, 140, 143, 145, 146
Concatemeric DNA 6-9, 23, 24, 33, 40, 46,
47, 53, 60, 75, 89, 91, 137, 138

cos 5-11, 13-17, 19, 21-33, 50
cosB 6, 8-13, 16, 17, 22, 23, 26, 28, 30, 32
cosN 6, 8-11, 15-17, 21-23, 28, 30-32
cosQ 6, 8-10, 22, 30-32
cos clearance 24, 25, 27, 28
Cystoviridae 117

D

Discontinuous headful packaging 54
DNA packaging 1-11, 13-18, 20-22, 25,
28-33, 40-42, 44, 46-55, 59-75, 79-83,
85, 86, 89-92, 94-99, 102-104, 106-108,
110-113, 135, 136, 140, 144
DNA packaging motor 2, 4, 11, 20, 29, 59,
61, 67, 68, 70, 72, 73, 102, 103, 113
DNA translocation 4, 16, 21, 28-30, 32, 37,
41, 47, 49, 51-54, 80, 90, 93-97, 99,
102, 108
Double-stranded DNA (dsDNA) virus 1-6,
11, 15, 52, 80, 86, 117, 130, 131
DR1 136, 137, 138, 143, 145, 146
DR2 136, 143
DR4 136
dsRNA virus 118, 119, 123, 130
Duplex nicking 6, 8, 9, 14-17, 21, 23, 24, 26,
28, 31

E

E. coli DNA polymerase III 6
Endonuclease 6, 8, 14-16, 19, 24, 25, 32, 48,
53, 54, 63, 66-68, 90, 93, 94, 97
Ensemble averaging 73
Escherichia coli 5-7, 9, 13, 14, 54, 70, 71, 91,
103, 121, 126
Escherichia coli integration host factor 9, 13,
see also Integration host factor
Extent-of-packaging sensor 32

G

- gp1 90-94, 97, 98
 gp2 90-95, 97
 gp3 102, 103, 106-109, 113
 gp6 67, 74, 89-91, 95-97
 gp7 90, 91, 103
 gp9 64, 69, 70
 gp13 89-91
 gp16 40-44, 46, 47, 49, 50, 52, 53, 68, 69,
 90, 97, 102-104, 106-109, 113, 114
 gp17 40, 41, 43-48, 51-53, 55, 69
 gp17s 46
 gp18 64, 65, 67
 gp19 62, 64, 65, 67, 68, 73
 gp20 40, 41, 46, 48, 49, 53, 54
 gp23 40, 41
 gp24 40, 41
 gpA 5, 6, 8-11, 14-20, 22-24, 26-30, 32, 52
 gpD protein 30
 gpFI 6, 24-28, 31, 33
 gpNu1 5, 6, 8-14, 16-20, 22, 23, 26, 28, 33

H

- Headful cleavage 81-85, 96-98
 Headful packaging 50, 54, 89, 97, 99, 125
 Helicase 8, 14-18, 23, 28, 29, 45, 63, 131
Herpesviridae 80, 135
 Herpesvirus 1, 3-5, 29, 40, 41, 44, 86, 99,
 135-137, 140, 142-145
 HSV DNA replication 136
 HSV-1 DNA 136, 138, 140

I

- IHF-gpNu1 nucleoprotein complex 13
 Integration host factor (IHF) 6, 9, 10, 12-14,
 17, 22, 23, 28, 33, 53, *see also Escherichia*
coli integration host factor
 Intranuclear transport protein 144

M

- Metrizamide low density (or MLD) capsid II
 70
 Minus-strand synthesis 123, 125-129
 Molecular motor 4, 55, 102, 109, 111

N

- Nuclease 1, 3, 14-18, 20, 23, 24, 28, 46, 51,
 81, 82, 84, 85, 96, 97, 143
 Nuclease/helicase domain 14, 15
 Nucleoprotein complex 93

O

- o29 102-104, 106-114

P

- φ6 4, 117-119, 121-124, 126-131
 P1 47, 54, 89, 118, 119, 122-125, 128, 129
 P2 26, 118, 119, 122, 128, 129
 P4 118, 119, 122, 124, 125, 128-131
 P7 118, 119, 122, 123, 128, 129
 P22 1, 26, 27, 32, 47, 48, 72, 80-86, 89, 96,
 98
pac 1, 2, 6, 27, 47-50, 66, 68, 81-84, 89-95,
 98, 99, 120-124, 126-128, 131, 136-138,
 142, 143, 145, 146
pacB 61, 62, 66
pacC 92-94
 Packaging ATPase 3, 7, 15, 18, 24, 29, 59,
 103
pacL 92-94
pacR 92-94
 Phage assembly 104
 Polymerase P2 122, 128
 Portal complex 1, 3, 20, 21, 24, 25, 28-30,
 32, 33, 80, 91, 141
 Portal protein 2, 3, 6, 20, 24, 29, 32, 41, 46,
 48, 49, 51, 54, 80, 82-85, 89-93, 95-97,
 99, 130, 141
 Portal vertex 8, 20, 21, 24, 29, 40, 41, 50, 85,
 86, 91, 95-97, 102, 103, 135, 139, 140,
 144, 145
 Poxvirus 1
 Procapsid 1-5, 7, 8, 10, 11, 14, 17, 20, 21,
 23-30, 32, 33, 50, 51, 59, 60-62, 64-67,
 69-72, 74, 75, 80, 82-86, 89-91, 93-96,
 99, 117, 119, 121-123, 128-131, 135,
 137, 139-142, 144-146
 Prohead expansion 50
 pSac16 104
Pseudomonas syringae 117

R

- ⊖ replication 6
- σ replication 6
- Reoviridae* 118, 131
- Reovirus 4, 118, 131
- RNA polymerase 24, 53, 63, 65, 119, 121, 122
- RNA translocation 130, 131
- RNA virus 4, 117-119, 123, 130

S

- SARS 4
- Shp 30
- Single-molecule analysis 73
- Single-particle analysis 68, 73, 74
- SPP1 1, 26-28, 32, 43, 44, 47, 48, 89-99
- ssRNA 121-131
- Stabilization proteins 2
- Strand separation 7, 9, 14, 17, 18, 21, 23, 24, 26, 30, 31, 60
- Structure of capsid 68

T

- T3 28, 29, 46, 47, 50, 53, 59-70, 72, 73, 75
- T4 1, 3, 15, 28, 32, 40-55, 60, 67, 68, 89, 143
- T7 1, 47, 48, 50, 53, 59-75, 121
- Terminase 1-3, 5-11, 13-33, 40-53, 55, 80, 82-86, 90, 91, 93-99, 130, 135, 136, 140-146
- Translocase domain 14, 15
- Translocating motor 2, 29, 30

U

- Ub* 136, 146
- Uc* 136
- U_L6 140, 141, 144, 145 *see also* Portal vertex
- U_L15 45, 140, 142-145
- U_L17 140, 144
- U_L25 140-142, 144, 145
- U_L28 140, 142-145
- U_L32 140, 144
- U_L33 140, 142-144

V

- VP21 137, 139, 145
- VP22a 137, 139, 145
- VP24 137, 139, 145

W

- West Nile fever 4