tail completion or Neck1 protein tail length tape measure protein virion structural protein tail assembly chaperone	tail fiber assembly protein		deoxynucleoside monophosphate kinase RuvC-like Holliday junction reso DNA polymerase exonuclease subun ribonucleoside diphosphate reductase small subunit   Sir2 (NAD anaerobic ribonucleotide reductase small subunit   nucleotide p anaerobic ribonucleoside reductase large subunit   ATP-depende	T
terminase large subunit	wedge subunit  membrane protein  eplate protein  tail fiber protein  tail protein  ATPase  ATPase	DNA primase/helicase	PhoH-like phosphate starvation-inducible ribonucleotide reductase endonuclease virion structural protein ribonucleotide reductase large subunit transposase DNA methyltransferase thymidylate synthase exonuclease all unknown function in endolyse with the control of the control	replication initiation protein
Bas 58 1:136906(+)		DNA polymerase	NrdD-like anaerobic ribonucleotide reductas anaerobic ribonucleoside reductase large subunit  WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	endonuclease VII
Bas56 1:135345(+)  DNA methyltransferase		MTase_III_00005 Type DNA polymerase	HEase_00016 homing endo <u>nucl</u> ease	
Bas50 1:138240(+)  DNA methyltransferase  Bas48 1:137623(+)		endonuclease  T phosphatase  Share the control of t		donuclease    Comparison   Comp
Bas49 1:139980(+)	endolysin	DNA methyltransferase DNA polymerase		
Bas53 1:135602(+)  DNA methyltransferase  Bas55 1:135630(+)	endolysi endolysin		structural protein_virion structural protein  WHANNELLE WARE WARE WARE WARE WARE WARE WARE WAR	
Bas54 1:136346(+)  terminase large subunit  Bas52 1:137380(+)		DNA polymerase	WKWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	terminase large subunit
Bas59 1:131526(+)			DprA-like DNA recombination-mediator protein PhoH-like phosphate starvation-inducible Ninl-like serine-threonine phosphatase    T	
tail completion or Neck1 protein tail length tape measure protein  DNA methyltransferase colanic acid degrac terminase large subunit virion structural protein portal proteinminor head proteintail fiber protein tail fiber protein lipoprotein	dation DNA pri <u>mase/helicase</u> membrane protein rib r protein glycosyltransferase tellurite resistance hydrolas	ribonucleotide reductase NrdA-like tRNA amidotransferase bonucleotide reductase sehistidyl tRNA synthetase tTPase     DNA helicase   ATPase   PDC-M42C_WP_117837142.1	dTDP-4-dehydrorhamnose 3 nucleotide-sugar epimerase exonuclea histidyl tRNA synthetase thioredoxin domain HNH endor peptidase HsIV family O-antigen (VF0392) Thymidine kinase	ase recombination-associated nicotinamide phosphoribosyl transferase nuclease ribose-phosphate pyrophosphokinase hol-like chemotaxis phosphoesterase Rz-like spanin
Bas62 1:144831(+)  tail spike protein tail spike protein  Bas60 1:150425(+)		endonuclease  Gabija_GajB_2		
Bas61 1:146666(+)  trim_DfrA10-NCBIFAM trimethoprim-resistant dihydrofolate redictail completion or Neck1 protein tail length tape measure protein baseplate wedge subunit tail assembly chaperone	uctase DfrA10 (NF000018.2)  NrdD-like anaerobic ribonucleotide reductase large subunit anaerobic ribonucleoside reductase large subunit ribose-phosphate <u>py</u> rophosphokinase			
head maturation protease baseplate protein transcriptional regulator major head protein baseplate spike HNH endon head protein virion structural protein transcriptional regulator	nuclease MazG-like pyrophosphatase unknov RIIB lysis minor tail protein NAD synthetase membrane protein polymerase exonuclease membrane protein RIIA lysis inhibitions.	icleotide kinase wn function function Rz-like spanin endolysin itor phosphatase tail protein RNA-binding protein		
tail length tape measure protein head scaffolding protein head-tail adaptor Ad1 terminase large subunit major head protein DNA polymerase processivi queuine tRNA-ribosylti	omain-containing protein ty factor	terminase small subunit ase		
portal protein tail terminator tail fiber protein Dpd_Fo  Bas24 1:60068(+)  tail fiber protein lipoprotein tail fiber protein		n		
Bas21 1:56589(+)  tail protein  Bas22 1:58567(+)				
Bas23 1:60090(+)  membrane protein  tail fiber protein  Bas25 1:58342(+)	HNH endonuclease			
Hoc-like head decoration L-glutamine-D-fructose-6-phosphat	ngle strand DNA binding protein te aminotransferase dUTPase endolysin   Rnase H protease Rz-like spanin   holin   RNH endonuclease   pyrophosphatase			
tail completion or Neck1 protein head maturation protease collar tail protein for L-shaped tail fibre attachment base plate tail tube protein Tail assembly chaperone SbcD-like subunit of palindror single strand Di	me specific endonuclease			
tail assembly chaperone tail length tape measure protein	NAD-dependent DNA ligase NAD-dependent DNA ligase Solvase DnaB-like replicative helicase Sir2 (NAD-dependent deacetylase) transcriptional regulator onuclease transcriptional regulator PhoH-like phosphate starvation-ir DNA primase DNA binding protein tail length tape measure pro	orf148 broad-spectrum counter-defense (APISO35) anti-termination protein Q-like deoxynucleoside monophosphate kinase tRNA amidotransferase ATP-dependent protease	sic sites generated by host uracil glycosylase Ung  Cor superinfection exclusion protein receptor binding tail protein  DNA binding protein polynucleotide kinase membrane protein      membrane protein   DNA transfer protein   terminase small subunit	
Bas33 1:111607(+) endonuclease  tail protein endonuclease  tail protein  Bas32 1:112239(+)				
tail fiber protein  Bas31 1:113532(+)  collar tail protein for L-shaped tail fibre attachment  tail fiber protein  Lail fiber protein	tail length tape measure pro	tein HEase_00002 homing	Cor superinfection exclusion protein	in
T5 1:121750(+) tail fiber protein	Sir2 (NAD-dependent deacetylase)  Tribonucleotide reductase large endonuclease HEase	ge subunit  200030 homing HNH endonuclease HEase_00016 homing holin		
tail fiber protein		PnuC-like nicotinamide mononucleotide transport nicotinamide-nucleotide adenylyltransferase HEase_00016 homing tail fiber protein HNH endonuclease Rz-like spanin		
Bas28 1:115446(+) structural protein with Ig domain	HNH endonucle.	Rz-like spanin  Rz-like spanin  Rz-like spanin  Rz-like spanin  Rz-like spanin	HNH endonuclease	
Bas29 1:110821(+)  endonuclease  Bas30 1:114488(+)  tail fiber protein HNH endo	Onuclease transcriptional regulator	phosphoesteras		
Bas27 1:114179(+)		nucleoside triphosphate pyrophosphohydi Mrh transcription modulator under heat shock FmdB-like transcriptional regulator MotB-like transcriptional regulator MotB-like transcriptional regulator	olase	
minor head protein inhibitor of protease  UvsY-like recombination mediator  baseplate hub subunit and tail length baseplate hub distal subunit  head maturation protease  baseplate wedge subunit  Hoc-like head decoration   Alt-like RNA polymerase ADP-ribos head scaffolding protein  head scaffolding protein  unknown function  LDNA helicase baseplate tail tube can	hinge connector of long tail late promoter transcriptional regulator single strand DNA binding protein RNA ligase and tail fiber protein attachment catalyst   long tail fib yltransferase inhibitor of host transcription   long tail fiber protein pent DNA ligase     dihydrofolate reductase	otA-like activator of middle period transcription fiber protein distal connector cef modifier of supressor tRNAs   head vertex assembly   head vertex assembly   head vertex assembly   RNA polymerase ADP-ribosylase   RNA polymerase ADP-ribosylase   DenB-like DNA endonuclease IV   DnaB-like replicative   DnaB-like repl	SbcD-like subunit of palindrome specific endonuclease chaperone starvation-ir Lamassu-Fam_LmuB_SMC_Cap4_nuclease_II elicase antitoxin from a toxin-antitoxin system ribonucleotide reductase DNA polymerase processivity factor PinA anti-TA_(APISO14) c)clamp loader of DNA polymerase unknown function	deoxynucleoside monophosphate kinase nducible transcriptional regulator baseplate hub sub <u>unit</u> and tail lysozyme valyl tRNA synthetase modifier PAAR motif of membran proteins vs.4 anti-CBASS (APISO02) Acb1 anti-CBASS (APISO16) baseplate wedge tail fiber protein connector internal virion protein baseplate wedge subunit   membrane protein internal virion protein   baseplate wedge subunit     membrane protein internal virion protein   baseplate wedge subunit     unknown function   IpI anti-RN (APISO90)   baseplate wedge subunit
major head protein   baseplate hub   baseplate hub   unkr   tail tube major head protein   baseplate hub   tail sheath prohead   RNA ligase DNA helicase     tail tube	head morphogenesis homing endonuclease transcriptional regulator polynucleotide kinase DNA helicase loader unknown function Unknown function dCMP deaminase unknown function tail fiber protein proximal nown function Rz-like spanin unknown function Tysis inhibition endonuclease	DNA topoisomerase II unknown function decoy of host sigma 32 thymidy unknown function decoy of host sigma 32 thymidy unknown function unknown	clamp loader of DNA polymerase unknown function nucleotidyl late synthase         unknown function   unknown function   RNA polymerase binding       unknown function   ase translation repressor   endonuclease VII unknown function   hAPISO28     RNA polymerase sigma factor unknown function   hAPISO28   unknown function   hAPISO28   unknown function   hAPISO28   unknown function   with the polymerase sigma factor unknown function   hAPISO28   unknown function   with the polymerase sigma factor unknown function   with the polymerase si	ion   unknown function tail fiber chaperone     head-tail adaptor Ad2 unknown function   unknown function   tail sheath stabilizer
Bas44 1:166773(+)  Hoc-like head decoration Hoc-like head decoration  Bas39 1:169509(+)  Hoc-like head decoration	homing endonuclease  homing endonuclease  homing endonuclease	tail fiber protein adfA anti-TA (API:	HNH endonuclease  KKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK	
Bas40 1:164714(+)  Hoc-like head decoration Hoc-like head decoration  Bas41 1:165574(+)		RIIA lysis inhibitor RIIA lysis inhibitor	nucleotidy  HNH endonuclease homing endonuclease	Altransferase endonuclease V N-glycosylase UV repair enzyme  (Internal head protein
Bas42 1:168255(+)	ribonucleotide reductase class la beta subun  aerobic NDP reductase small subunit  HEase_00032 homing		homing endonuclease HNH endonuclease	internal virion protein
Bas45 1:170053(+)  homing endonuclease  Bas38 1:167411(+)	homing endonuclease	Ndd-like nucleoid disruption protein anti-restriction nuclease Ndd-like nucleoid disruption protein  Virion structural protein hom	ing endonuclease  KKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK	
Bas36 1:167732(+)	thymidylate synthase homing endonuclease thymidylate synthase	iber protein distal subunit unknown function	homing endonuclease    homing endonuclease	endolysin
Bas37 1:167832(+)	aerobic NDP reductase small subunit inhibitor of host transcription  hibitor of host transcription  hibitor of host transcription	oMTase_00011 orphan		HNH endonuclease
Bas35 1:166861(+)  homing endonuclease		per protein distal subunit unknown function Unknown function WKW CW CW WKW CW CW WKW CW	homing endonuclease HNH endonuclease homing endonuclease	ease RNA ligase RNA ligase homing endonuclease
Bas43 1:166115(+)  Hoc-like head decoration Hoc-like head decoration DNA helicase homing endonuclease DNA helicase	thymidylate synthase homing endonuclease thymidylate synthase lo	ong tail fiber protein distal subunit DNA topoisomerase II	homing endonyclesse. HEsse 00030 homing	ase 00004 homing homing endonuclease homing endonuclease
T6 1:168706(+)  Hoc-like head decoration Hoc-like head decoration Hoc-like head decoration	HEase_00030 homing  KC KC KM CK C KM CK C KM CK C KM C K C K	unknown function unknown function  OMTase_00011 orphan	homing endonuclease HEase_00030 homing HEase_No030 homing HEase_No030 homing HEase_No030 homing HEase_No030 homing HEase_No030 homing endonuclease Unknown function HEASE ADP	
T2 1:163832(+)  homing endonuclease	ribonucleotide reductase class la beta subunit aerobic NDP reductase small subunit	FmdB-like transcriptional regulator  DNA topoisomerase II  homing endonuclease  ONA topoisomerase II  homing endonuclease  periplasmic protein    unknown function   HEase_0	NrdD-like anaerobic ribonucleotide reductase large anaerobic ribonucleoside reductase large subunit homing endonuclease  beta-glucosyltransferase  beta-glucosyltransferase  homing endonuclease  homing endonuclease  homing endonuclease	homing endonuclease internal virion protein
T4D 1:168903(+)  prohead  phospho-2	2-dehydro-3-deoxyheptonate aldolase			embrane protein Ipil anti-RM (APIS015) tionhelicase loaderinternal head proteinhead closure
Bas47 1:168968(+)		arabin phosphoh thymidylate kina	ose 5-phosphate isomerase eptose isomerase inhibitor of host Lon protease se   unknown function tidase   RNA polymerase binding   unknown function	internal virion protein helicase loader
Bas46 1:169031(+)  tail length tape measure protein tail completion or Neck1 protein tail length tape measure protein tail length tape measure protein tail length tape measure protein virion structural protein  Erf-like ssDNA annealing protein				
head maturation protease terminase large subunit head morphogenesis minor tail protein of Tase_00 DNA remajor head protein major head protein major tail protein with major tail protein with major tail protein tail protein exonuclease VIII tail protein tail terminator tail protein DNA primase	otor  1010 orphan Epair exonuclease  Rž-like spanin  DNA helicase terminase small subunit holin HNH endonuclease  NH HNH WARMANN NANANAMAN			
BasO5 1:47775(+)  tail length tape measure protein outer membrane protein tail fiber protein  membrane associated protein  BasO4 1:51777(+)	polynucleotide kinase			
tail length tape measure protein  Bas06 1:51474(+)  outer membrane protein	polynucleotide kinase			
Bas07 1:51129(+)  Bas11 1:49715(+)  Bas10 1:49911(+)				
Cor anti-superinfection exclusion (APISO32) tail length tape measure protein membrane associated protein outer membrane protein transcriptional reg Bas09 1:51285(+)	gulator  DDDMDMDMDMDMDMDDDMMDDMDDDMMD			
tail length tape measure protein  Bas08 1:50731(+) tail length tape measure protein outer membrane protein	ional regulator			
Bas12 1:49298(+)  tail length tape measure protein  Bas13 1:50192(+)	holin DNA methyltransferase RNA-binding protein			
tail length tape measure protein membrane associated protein tail completion or Neck1 protein outer membrane protein virion structural protein virion structural protein tail fiber protein  Baso3 1:47731(+)  OMTase_00015 orphan	Rz-like spanin polynucleotide kinase			
Bas02 1:47149(+)  head decoration head closure Hc1 tail fiber protein tail completion or Neck1 protein tail fiber protein tail	rotein			
tail completion or Neck1 protein head scaffolding protein head-tail adaptor Ad1 head morphogenesistail length tape measure protein major head protein Rz-like spanin   minor tail protein  DNA methyltransferase polynucleotide kinase   HHH endonuclease   l   endonuclease   DNA ligaseDNA pol	ase replicative <u>helicas</u> e-primase lymerase transposase endolysin			
Bas15 1:44550(+) holin_holin head scaffo <u>ld</u> ing protein	exonuclease holin terminase			
Bas18 1:44882(+)  RusA-like Holliday junction resolvase tail fiber pre	otein			
tail fiber tail protein tail pr	NO N			
Kil protein for ba	nbrane-anchored ion channel, Abi component NinB/ Orf homologous recombination mediator NinG/ Rap DNA junction specific endonuclease phosphoadenosine phosphosulfate reductase acterial septation inhibition Id annealing protein CII-like transcriptional activator			
DNA packaging chaperone FI head-tail adaptor Ad1 Sie B s terminase large subunit head closure Hc1 minor tail protein head decoration minor tail protein major tail protein lead fiber protein excisionase large fiber protein excisionase tail fiber protein excisionase	RecBCD (APIS092)  superinfection exclusion			
PmgG-like head morphogenesis PmgC-like head morphogenesis PDC-M04B_WP_210387105.1 DdrA	RM_Type_III_Type_III_REasesType_III single strand DNA binding protein A-like anti-restriction protein ermining protein Ref-like RecA fi	I_REases_FAM_0.einsi_trimmed DNA polymerase III theta subunit TciB-like inhibition of cell division or resistance to coli Lpa-like transcriptional activator baseplate hub subunit and tail lysozyme ilament endonuclease Pmg\$-like hea <u>d m</u> orphogenesis DnaB-like replicative helicase	cin	
	te antirestriction A anti-RM (APISO31) tail fiber protein UIx-like anti-restriction vertase transposase portal protein methyltransferase otein endolysin transposase holin DarB anti-RM (APISO30)	UmuD-like protein   baseplate wedge subunit nucleoside triphosphate pyrophorpholike antitoxin   baseplate protein   baseplate protein   HNH endonuclease   tail protein   tellurite resistance   Doc-like toxin glycosyltransferase   tail protein   DNA methyltransferaselipo	sociated	
baseplate assembly protein Old_exonuclease_Old_exonuclease baseplate wedge subunit terminase small subunit head-tail adaptor Ad 1   Cox-like excisic head scaffolding protein baseplate protein tail length tape measure prot transcriptional r	regulator			
baseplate hub terminase large subunit tail terminator tail protein   Rz-like spanin head closure tail protein nicking at origin of replication endolysin tail fiber protein tail protein	onal regulator  ase replication initiation protein			
tail length tape measure protein tail sheath and receptor binding protein tail assembly protein RZ-like spanin virion structural protein endolysin virion structural protein terminase large subunit portal protein virion structural protein and	Hoc-like  Sak4-like ssDNA annealing protein  single strand DNA binding protein Dda-like helicase  DNA polymerase  ti-Thoeris (APISO79)  HOC-like  MRH endonucleas  ACTP deaminase exonuclease  RIIB lysis inhibitor  endonucle	RNA polymerase unknown function		
appendage   holin major head protein virion RNA polyme	HNH endonuclease  DNA polymerase  DNA polymerase  DNA polymerase	Hease unknown function or other lunknown function with the second of the		
Bas69 1:70849(+)  Gp2.5-like ssDNA binding protein and ssDNA annealing protein internal virion host range and adsorption protein  HOS17_gp01 anti-BREX (APIS091) Gp5.5-like host HNS inhibition internal virion protein major head protein dGTPase inhibitor head-tail adaptor internal virion protein head-tail daptor internal virion protein host range and adsorption host range and adsorption protein host range and adsorption host range	n pr <u>otein with e</u> ndolysin domain otein rotein	ANNUAL ANNUAL ANNUAL STREET		
N4-like RNA polymerase   anti-TA (APIS080)   head protein   serine-threonine kinase   endonuclease   head assembly internal viring training the protein   tail protein   terminase large subunit DNA ligase   amidase   exonuclease   tail protein   terminase large subunit DNA ligase   amidase   exonuclease   tail protein	terminase small subunit			
serine-threonine kinase HNH endonuclease nucleotide kinase host RecBCD nuclease inhibitor  Bas67 1:39315(+)  HNH endonuclease gp5.9 anti-RecBCD (APISO23) Ocr anti-BREX (APISO10) endonuclease host RecBCD nuclease inhibitor	otein			
Bas65 1:39451(+)  Bas64 1:39842(+)  HNH endonuclease				
77 1:39937(+)				
gp4.5 anti-TA (APISO11) RNA polymerase inhibitor HNH endonuclease structural protein the base of 1:38194(+)  Base 1:38194(+)	with Ig domain			