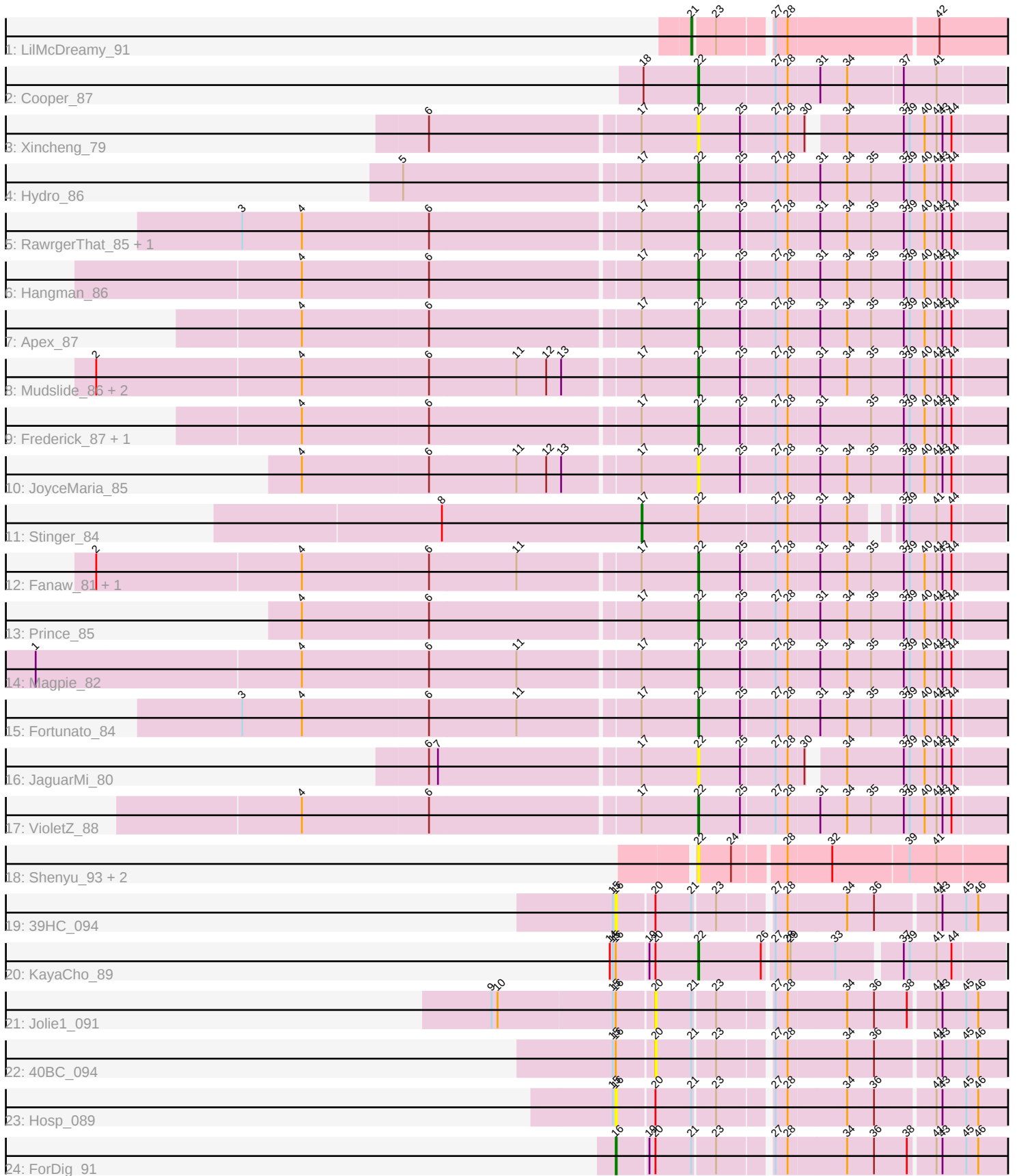


Pham 249094



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 249094 Report

This analysis was run 02/07/26 on database version 634.

Pham number 249094 has 31 members, 11 are drafts.

Phages represented in each track:

- Track 1 : LilMcDreamy_91
- Track 2 : Cooper_87
- Track 3 : Xincheng_79
- Track 4 : Hydro_86
- Track 5 : RawrgerThat_85, Mithril_85
- Track 6 : Hangman_86
- Track 7 : Apex_87
- Track 8 : Mudslide_86, Waleliano_85, BrownCNA_87
- Track 9 : Frederick_87, Zemanar_85
- Track 10 : JoyceMaria_85
- Track 11 : Stinger_84
- Track 12 : Fanaw_81, Lolalove_87
- Track 13 : Prince_85
- Track 14 : Magpie_82
- Track 15 : Fortunato_84
- Track 16 : JaguarMi_80
- Track 17 : VioletZ_88
- Track 18 : Shenyu_93, DigitDog_94, Nangang_93
- Track 19 : 39HC_094
- Track 20 : KayaCho_89
- Track 21 : Jolie1_091
- Track 22 : 40BC_094
- Track 23 : Hosp_089
- Track 24 : ForDig_91

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 22, it was called in 17 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apex_87, BrownCNA_87, Cooper_87, DigitDog_94, Fanaw_81, Fortunato_84, Frederick_87, Hangman_86, Hydro_86, JaguarMi_80, JoyceMaria_85, KayaCho_89, Lolalove_87, Magpie_82, Mithril_85, Mudslide_86, Nangang_93, Prince_85,

RawrgerThat_85, Shenyu_93, VioletZ_88, Waleliano_85, Xincheng_79, Zemanar_85,

Genes that have the "Most Annotated" start but do not call it:

- Stinger_84,

Genes that do not have the "Most Annotated" start:

- 39HC_094, 40BC_094, ForDig_91, Hosp_089, Jolie1_091, LilMcDreamy_91,

Summary by start number:

Start 16:

- Found in 6 of 31 (19.4%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 50.0% of time when present
- Phage (with cluster) where this start called: 39HC_094 (B6), ForDig_91 (B6), Hosp_089 (B6),

Start 17:

- Found in 20 of 31 (64.5%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Stinger_84 (B4),

Start 20:

- Found in 6 of 31 (19.4%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: 40BC_094 (B6), Jolie1_091 (B6),

Start 21:

- Found in 6 of 31 (19.4%) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 16.7% of time when present
- Phage (with cluster) where this start called: LilMcDreamy_91 (B12),

Start 22:

- Found in 25 of 31 (80.6%) of genes in pham
- Manual Annotations of this start: 17 of 20
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Apex_87 (B4), BrownCNA_87 (B4), Cooper_87 (B4), DigitDog_94 (B5), Fanaw_81 (B4), Fortunato_84 (B4), Frederick_87 (B4), Hangman_86 (B4), Hydro_86 (B4), JaguarMi_80 (B4), JoyceMaria_85 (B4), KayaCho_89 (B6), Lolalove_87 (B4), Magpie_82 (B4), Mithril_85 (B4), Mudslide_86 (B4), Nangang_93 (B5), Prince_85 (B4), RawrgerThat_85 (B4), Shenyu_93 (B5), VioletZ_88 (B4), Waleliano_85 (B4), Xincheng_79 (B4), Zemanar_85 (B4),

Summary by clusters:

There are 4 clusters represented in this pham: B4, B5, B6, B12,

Info for manual annotations of cluster B12:

- Start number 21 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B4:

- Start number 17 was manually annotated 1 time for cluster B4.
- Start number 22 was manually annotated 16 times for cluster B4.

Info for manual annotations of cluster B6:

- Start number 16 was manually annotated 1 time for cluster B6.
- Start number 22 was manually annotated 1 time for cluster B6.

Gene Information:

Gene: 39HC_094 Start: 68290, Stop: 67925, Start Num: 16

Candidate Starts for 39HC_094:

(15, 68293), (Start: 16 @68290 has 1 MA's), (20, 68254), (Start: 21 @68218 has 1 MA's), (23, 68197), (27, 68149), (28, 68137), (34, 68080), (36, 68053), (41, 67996), (43, 67990), (45, 67966), (46, 67954),

Gene: 40BC_094 Start: 68254, Stop: 67925, Start Num: 20

Candidate Starts for 40BC_094:

(15, 68293), (Start: 16 @68290 has 1 MA's), (20, 68254), (Start: 21 @68218 has 1 MA's), (23, 68197), (27, 68149), (28, 68137), (34, 68080), (36, 68053), (41, 67996), (43, 67990), (45, 67966), (46, 67954),

Gene: Apex_87 Start: 66047, Stop: 65745, Start Num: 22

Candidate Starts for Apex_87:

(4, 66434), (6, 66308), (Start: 17 @66104 has 1 MA's), (Start: 22 @66047 has 17 MA's), (25, 66005), (27, 65972), (28, 65960), (31, 65930), (34, 65903), (35, 65879), (37, 65846), (39, 65840), (40, 65825), (41, 65813), (43, 65807), (44, 65798),

Gene: BrownCNA_87 Start: 65995, Stop: 65693, Start Num: 22

Candidate Starts for BrownCNA_87:

(2, 66586), (4, 66382), (6, 66256), (11, 66169), (12, 66139), (13, 66124), (Start: 17 @66052 has 1 MA's), (Start: 22 @65995 has 17 MA's), (25, 65953), (27, 65920), (28, 65908), (31, 65878), (34, 65851), (35, 65827), (37, 65794), (39, 65788), (40, 65773), (41, 65761), (43, 65755), (44, 65746),

Gene: Cooper_87 Start: 65343, Stop: 65047, Start Num: 22

Candidate Starts for Cooper_87:

(18, 65397), (Start: 22 @65343 has 17 MA's), (27, 65268), (28, 65256), (31, 65226), (34, 65199), (37, 65145), (41, 65112),

Gene: DigitDog_94 Start: 68274, Stop: 67966, Start Num: 22

Candidate Starts for DigitDog_94:

(Start: 22 @68274 has 17 MA's), (24, 68241), (28, 68193), (32, 68151), (39, 68076), (41, 68049),

Gene: Fanaw_81 Start: 65582, Stop: 65280, Start Num: 22

Candidate Starts for Fanaw_81:

(2, 66173), (4, 65969), (6, 65843), (11, 65756), (Start: 17 @65639 has 1 MA's), (Start: 22 @65582 has 17 MA's), (25, 65540), (27, 65507), (28, 65495), (31, 65465), (34, 65438), (35, 65414), (37, 65381), (39, 65375), (40, 65360), (41, 65348), (43, 65342), (44, 65333),

Gene: ForDig_91 Start: 67574, Stop: 67209, Start Num: 16

Candidate Starts for ForDig_91:

(Start: 16 @67574 has 1 MA's), (19, 67544), (20, 67538), (Start: 21 @67502 has 1 MA's), (23, 67481), (27, 67433), (28, 67421), (34, 67364), (36, 67337), (38, 67304), (41, 67280), (43, 67274), (45, 67250), (46, 67238),

Gene: Fortunato_84 Start: 65374, Stop: 65072, Start Num: 22

Candidate Starts for Fortunato_84:

(3, 65821), (4, 65761), (6, 65635), (11, 65548), (Start: 17 @65431 has 1 MA's), (Start: 22 @65374 has 17 MA's), (25, 65332), (27, 65299), (28, 65287), (31, 65257), (34, 65230), (35, 65206), (37, 65173), (39, 65167), (40, 65152), (41, 65140), (43, 65134), (44, 65125),

Gene: Frederick_87 Start: 65861, Stop: 65559, Start Num: 22

Candidate Starts for Frederick_87:

(4, 66248), (6, 66122), (Start: 17 @65918 has 1 MA's), (Start: 22 @65861 has 17 MA's), (25, 65819), (27, 65786), (28, 65774), (31, 65744), (35, 65693), (37, 65660), (39, 65654), (40, 65639), (41, 65627), (43, 65621), (44, 65612),

Gene: Hangman_86 Start: 66073, Stop: 65771, Start Num: 22

Candidate Starts for Hangman_86:

(4, 66460), (6, 66334), (Start: 17 @66130 has 1 MA's), (Start: 22 @66073 has 17 MA's), (25, 66031), (27, 65998), (28, 65986), (31, 65956), (34, 65929), (35, 65905), (37, 65872), (39, 65866), (40, 65851), (41, 65839), (43, 65833), (44, 65824),

Gene: Hosp_089 Start: 65595, Stop: 65230, Start Num: 16

Candidate Starts for Hosp_089:

(15, 65598), (Start: 16 @65595 has 1 MA's), (20, 65559), (Start: 21 @65523 has 1 MA's), (23, 65502), (27, 65454), (28, 65442), (34, 65385), (36, 65358), (41, 65301), (43, 65295), (45, 65271), (46, 65259),

Gene: Hydro_86 Start: 65948, Stop: 65646, Start Num: 22

Candidate Starts for Hydro_86:

(5, 66236), (Start: 17 @66005 has 1 MA's), (Start: 22 @65948 has 17 MA's), (25, 65906), (27, 65873), (28, 65861), (31, 65831), (34, 65804), (35, 65780), (37, 65747), (39, 65741), (40, 65726), (41, 65714), (43, 65708), (44, 65699),

Gene: JaguarMi_80 Start: 65926, Stop: 65639, Start Num: 22

Candidate Starts for JaguarMi_80:

(6, 66187), (7, 66178), (Start: 17 @65983 has 1 MA's), (Start: 22 @65926 has 17 MA's), (25, 65884), (27, 65851), (28, 65839), (30, 65824), (34, 65797), (37, 65740), (39, 65734), (40, 65719), (41, 65707), (43, 65701), (44, 65692),

Gene: Jolie1_091 Start: 67627, Stop: 67298, Start Num: 20

Candidate Starts for Jolie1_091:

(9, 67786), (10, 67780), (15, 67666), (Start: 16 @67663 has 1 MA's), (20, 67627), (Start: 21 @67591 has 1 MA's), (23, 67570), (27, 67522), (28, 67510), (34, 67453), (36, 67426), (38, 67393), (41, 67369), (43, 67363), (45, 67339), (46, 67327),

Gene: JoyceMaria_85 Start: 65899, Stop: 65597, Start Num: 22

Candidate Starts for JoyceMaria_85:

(4, 66286), (6, 66160), (11, 66073), (12, 66043), (13, 66028), (Start: 17 @65956 has 1 MA's), (Start: 22 @65899 has 17 MA's), (25, 65857), (27, 65824), (28, 65812), (31, 65782), (34, 65755), (35, 65731), (37, 65698), (39, 65692), (40, 65677), (41, 65665), (43, 65659), (44, 65650),

Gene: KayaCho_89 Start: 67455, Stop: 67165, Start Num: 22

Candidate Starts for KayaCho_89:

(14, 67539), (15, 67536), (Start: 16 @67533 has 1 MA's), (19, 67503), (20, 67497), (Start: 22 @67455 has 17 MA's), (26, 67392), (27, 67383), (28, 67371), (29, 67368), (33, 67323), (37, 67263), (39, 67257), (41, 67230), (44, 67215),

Gene: LilMcDreamy_91 Start: 68544, Stop: 68251, Start Num: 21
Candidate Starts for LilMcDreamy_91:
(Start: 21 @68544 has 1 MA's), (23, 68523), (27, 68475), (28, 68463), (42, 68319),

Gene: Lolalove_87 Start: 65892, Stop: 65590, Start Num: 22
Candidate Starts for Lolalove_87:
(2, 66483), (4, 66279), (6, 66153), (11, 66066), (Start: 17 @65949 has 1 MA's), (Start: 22 @65892 has 17 MA's), (25, 65850), (27, 65817), (28, 65805), (31, 65775), (34, 65748), (35, 65724), (37, 65691), (39, 65685), (40, 65670), (41, 65658), (43, 65652), (44, 65643),

Gene: Magpie_82 Start: 65575, Stop: 65273, Start Num: 22
Candidate Starts for Magpie_82:
(1, 66226), (4, 65962), (6, 65836), (11, 65749), (Start: 17 @65632 has 1 MA's), (Start: 22 @65575 has 17 MA's), (25, 65533), (27, 65500), (28, 65488), (31, 65458), (34, 65431), (35, 65407), (37, 65374), (39, 65368), (40, 65353), (41, 65341), (43, 65335), (44, 65326),

Gene: Mithril_85 Start: 65732, Stop: 65430, Start Num: 22
Candidate Starts for Mithril_85:
(3, 66179), (4, 66119), (6, 65993), (Start: 17 @65789 has 1 MA's), (Start: 22 @65732 has 17 MA's), (25, 65690), (27, 65657), (28, 65645), (31, 65615), (34, 65588), (35, 65564), (37, 65531), (39, 65525), (40, 65510), (41, 65498), (43, 65492), (44, 65483),

Gene: Mudslide_86 Start: 66122, Stop: 65820, Start Num: 22
Candidate Starts for Mudslide_86:
(2, 66713), (4, 66509), (6, 66383), (11, 66296), (12, 66266), (13, 66251), (Start: 17 @66179 has 1 MA's), (Start: 22 @66122 has 17 MA's), (25, 66080), (27, 66047), (28, 66035), (31, 66005), (34, 65978), (35, 65954), (37, 65921), (39, 65915), (40, 65900), (41, 65888), (43, 65882), (44, 65873),

Gene: Nangang_93 Start: 68170, Stop: 67862, Start Num: 22
Candidate Starts for Nangang_93:
(Start: 22 @68170 has 17 MA's), (24, 68137), (28, 68089), (32, 68047), (39, 67972), (41, 67945),

Gene: Prince_85 Start: 65989, Stop: 65687, Start Num: 22
Candidate Starts for Prince_85:
(4, 66376), (6, 66250), (Start: 17 @66046 has 1 MA's), (Start: 22 @65989 has 17 MA's), (25, 65947), (27, 65914), (28, 65902), (31, 65872), (34, 65845), (35, 65821), (37, 65788), (39, 65782), (40, 65767), (41, 65755), (43, 65749), (44, 65740),

Gene: RawrgerThat_85 Start: 65580, Stop: 65278, Start Num: 22
Candidate Starts for RawrgerThat_85:
(3, 66027), (4, 65967), (6, 65841), (Start: 17 @65637 has 1 MA's), (Start: 22 @65580 has 17 MA's), (25, 65538), (27, 65505), (28, 65493), (31, 65463), (34, 65436), (35, 65412), (37, 65379), (39, 65373), (40, 65358), (41, 65346), (43, 65340), (44, 65331),

Gene: Shenyu_93 Start: 68168, Stop: 67860, Start Num: 22
Candidate Starts for Shenyu_93:
(Start: 22 @68168 has 17 MA's), (24, 68135), (28, 68087), (32, 68045), (39, 67970), (41, 67943),

Gene: Stinger_84 Start: 64428, Stop: 64096, Start Num: 17

Candidate Starts for Stinger_84:

(8, 64629), (Start: 17 @64428 has 1 MA's), (Start: 22 @64374 has 17 MA's), (27, 64299), (28, 64287), (31, 64257), (34, 64230), (37, 64194), (39, 64188), (41, 64161), (44, 64146),

Gene: VioletZ_88 Start: 66079, Stop: 65777, Start Num: 22

Candidate Starts for VioletZ_88:

(4, 66466), (6, 66340), (Start: 17 @66136 has 1 MA's), (Start: 22 @66079 has 17 MA's), (25, 66037), (27, 66004), (28, 65992), (31, 65962), (34, 65935), (35, 65911), (37, 65878), (39, 65872), (40, 65857), (41, 65845), (43, 65839), (44, 65830),

Gene: Waleliano_85 Start: 65747, Stop: 65445, Start Num: 22

Candidate Starts for Waleliano_85:

(2, 66338), (4, 66134), (6, 66008), (11, 65921), (12, 65891), (13, 65876), (Start: 17 @65804 has 1 MA's), (Start: 22 @65747 has 17 MA's), (25, 65705), (27, 65672), (28, 65660), (31, 65630), (34, 65603), (35, 65579), (37, 65546), (39, 65540), (40, 65525), (41, 65513), (43, 65507), (44, 65498),

Gene: Xincheng_79 Start: 65877, Stop: 65590, Start Num: 22

Candidate Starts for Xincheng_79:

(6, 66138), (Start: 17 @65934 has 1 MA's), (Start: 22 @65877 has 17 MA's), (25, 65835), (27, 65802), (28, 65790), (30, 65775), (34, 65748), (37, 65691), (39, 65685), (40, 65670), (41, 65658), (43, 65652), (44, 65643),

Gene: Zemanar_85 Start: 65760, Stop: 65458, Start Num: 22

Candidate Starts for Zemanar_85:

(4, 66147), (6, 66021), (Start: 17 @65817 has 1 MA's), (Start: 22 @65760 has 17 MA's), (25, 65718), (27, 65685), (28, 65673), (31, 65643), (35, 65592), (37, 65559), (39, 65553), (40, 65538), (41, 65526), (43, 65520), (44, 65511),