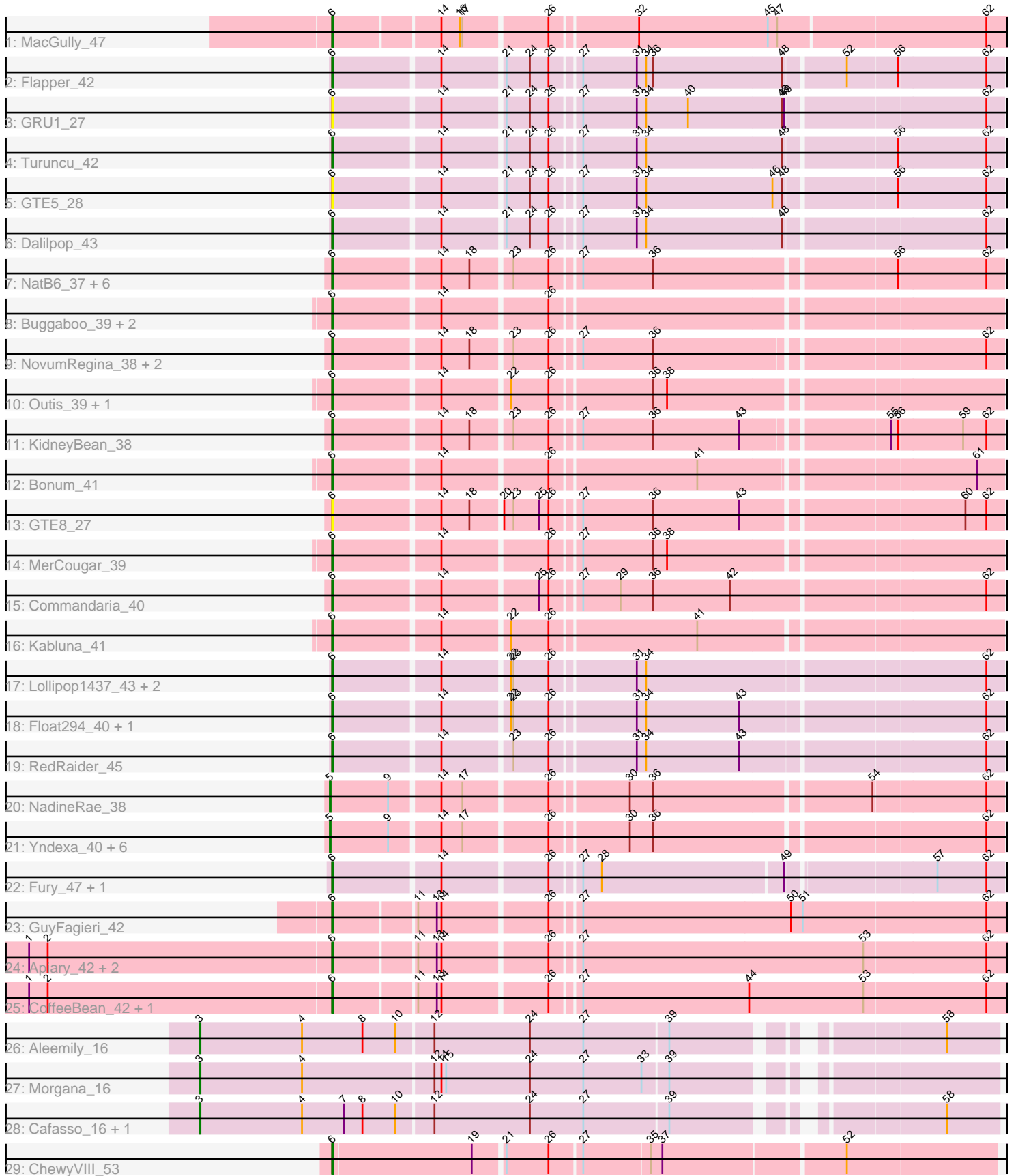


Pham 224638



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 224638 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224638 has 54 members, 3 are drafts.

Phages represented in each track:

- Track 1 : MacGully_47
- Track 2 : Flapper_42
- Track 3 : GRU1_27
- Track 4 : Turuncu_42
- Track 5 : GTE5_28
- Track 6 : Dalilpop_43
- Track 7 : NatB6_37, Kurt_38, Jifall16_37, Tracker_38, Wheezy_38, Foxboro_39, Emianna_38
- Track 8 : Buggaboo_39, NosilaM_41, SuperSulley_39
- Track 9 : NovumRegina_38, GrootJr_40, Arti_38
- Track 10 : Outis_39, StarStruck_39
- Track 11 : KidneyBean_38
- Track 12 : Bonum_41
- Track 13 : GTE8_27
- Track 14 : MerCougar_39
- Track 15 : Commandaria_40
- Track 16 : Kabluna_41
- Track 17 : Lollipop1437_43, Ennea_44, Patio_41
- Track 18 : Float294_40, Skysand_40
- Track 19 : RedRaider_45
- Track 20 : NadineRae_38
- Track 21 : Yndexa_40, IDyn_39, BiPauneto_41, Sukkupi_40, Marietta_40, HubbaBubba_36, WhoseManz_40
- Track 22 : Fury_47, Pleakley_47
- Track 23 : GuyFagieri_42
- Track 24 : Apiary_42, Braxoaddie_42, Polyuyki_42
- Track 25 : CoffeeBean_42, Maselop_42
- Track 26 : Aleemily_16
- Track 27 : Morgana_16
- Track 28 : Cafasso_16, ObLaDi_16
- Track 29 : ChewyVIII_53

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

The start number called the most often in the published annotations is 6, it was called in 39 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apiary_42, Arti_38, Bonum_41, Braxoaddie_42, Buggaboo_39, ChewyVIII_53, CoffeeBean_42, Commandaria_40, Dalilpop_43, Emianna_38, Ennea_44, Flapper_42, Float294_40, Foxboro_39, Fury_47, GRU1_27, GTE5_28, GTE8_27, GrootJr_40, GuyFagieri_42, Jifall16_37, Kabluna_41, KidneyBean_38, Kurt_38, Lollipop1437_43, MacGully_47, Maselop_42, MerCougar_39, NatB6_37, NosilaM_41, NovumRegina_38, Outis_39, Patio_41, Pleakley_47, Polyyuki_42, RedRaider_45, Skysand_40, StarStruck_39, SuperSulley_39, Tracker_38, Turuncu_42, Wheezy_38,

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

-

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

- Aleemily_16, BiPauneto_41, Cafasso_16, HubbaBubba_36, IDyn_39, Marietta_40, Morgana_16, NadineRae_38, ObLaDi_16, Sukkupi_40, WhoseManz_40, Yndexa_40,

Summary by start number:

Start 3:

- Found in 4 of 54 (7.4%) of genes in pham
- Manual Annotations of this start: 4 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aleemily_16 (DZ), Cafasso_16 (DZ), Morgana_16 (DZ), ObLaDi_16 (DZ),

Start 5:

- Found in 8 of 54 (14.8%) of genes in pham
- Manual Annotations of this start: 8 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BiPauneto_41 (CR4), HubbaBubba_36 (CR4), IDyn_39 (CR4), Marietta_40 (CR4), NadineRae_38 (CR4), Sukkupi_40 (CR4), WhoseManz_40 (CR4), Yndexa_40 (CR4),

Start 6:

- Found in 42 of 54 (77.8%) of genes in pham
- Manual Annotations of this start: 39 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apiary_42 (CR6), Arti_38 (CR2), Bonum_41 (CR2), Braxoaddie_42 (CR6), Buggaboo_39 (CR2), ChewyVIII_53 (singleton), CoffeeBean_42 (CR6), Commandaria_40 (CR2), Dalilpop_43 (CR1), Emianna_38 (CR2), Ennea_44 (CR3), Flapper_42 (CR1), Float294_40 (CR3), Foxboro_39 (CR2), Fury_47 (CR5), GRU1_27 (CR1), GTE5_28 (CR1), GTE8_27 (CR2), GrootJr_40 (CR2), GuyFagieri_42 (CR6), Jifall16_37 (CR2), Kabluna_41 (CR2), KidneyBean_38 (CR2), Kurt_38 (CR2), Lollipop1437_43 (CR3), MacGully_47 (CR), Maselop_42 (CR6), MerCougar_39 (CR2), NatB6_37 (CR2), NosilaM_41 (CR2), NovumRegina_38 (CR2), Outis_39 (CR2), Patio_41 (CR3), Pleakley_47 (CR5), Polyyuki_42 (CR6), RedRaider_45 (CR3), Skysand_40 (CR3), StarStruck_39 (CR2), SuperSulley_39 (CR2), Tracker_38 (CR2), Turuncu_42 (CR1), Wheezy_38 (CR2),

Summary by clusters:

There are 9 clusters represented in this pham: CR2, CR3, singleton, CR1, CR6, CR4, CR5, DZ, CR,

Info for manual annotations of cluster CR:

- Start number 6 was manually annotated 1 time for cluster CR.

Info for manual annotations of cluster CR1:

- Start number 6 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 6 was manually annotated 20 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 6 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 5 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 6 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CR6:

- Start number 6 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster DZ:

- Start number 3 was manually annotated 4 times for cluster DZ.

Gene Information:

Gene: Aleemily_16 Start: 9981, Stop: 10933, Start Num: 3

Candidate Starts for Aleemily_16:

(Start: 3 @9981 has 4 MA's), (4, 10113), (8, 10191), (10, 10233), (12, 10278), (24, 10401), (27, 10470), (39, 10575), (58, 10866),

Gene: Apiary_42 Start: 24321, Stop: 25141, Start Num: 6

Candidate Starts for Apiary_42:

(1, 23934), (2, 23958), (Start: 6 @24321 has 39 MA's), (11, 24420), (13, 24444), (14, 24450), (26, 24576), (27, 24609), (53, 24963), (62, 25116),

Gene: Arti_38 Start: 22581, Stop: 23383, Start Num: 6

Candidate Starts for Arti_38:

(Start: 6 @22581 has 39 MA's), (14, 22713), (18, 22749), (23, 22794), (26, 22839), (27, 22872), (36, 22962), (62, 23361),

Gene: BiPauneto_41 Start: 22337, Stop: 23145, Start Num: 5

Candidate Starts for BiPauneto_41:

(Start: 5 @22337 has 8 MA's), (9, 22412), (14, 22472), (17, 22499), (26, 22598), (30, 22691), (36, 22721), (62, 23123),

Gene: Bonum_41 Start: 22920, Stop: 23722, Start Num: 6

Candidate Starts for Bonum_41:

(Start: 6 @22920 has 39 MA's), (14, 23052), (26, 23178), (41, 23358), (61, 23688),

Gene: Braxoaddie_42 Start: 24310, Stop: 25130, Start Num: 6

Candidate Starts for Braxoaddie_42:

(1, 23923), (2, 23947), (Start: 6 @24310 has 39 MA's), (11, 24409), (13, 24433), (14, 24439), (26, 24565), (27, 24598), (53, 24952), (62, 25105),

Gene: Buggaboo_39 Start: 23405, Stop: 24210, Start Num: 6

Candidate Starts for Buggaboo_39:

(Start: 6 @23405 has 39 MA's), (14, 23537), (26, 23663),

Gene: Cafasso_16 Start: 9969, Stop: 10921, Start Num: 3

Candidate Starts for Cafasso_16:

(Start: 3 @9969 has 4 MA's), (4, 10101), (7, 10155), (8, 10179), (10, 10221), (12, 10266), (24, 10389), (27, 10458), (39, 10563), (58, 10854),

Gene: ChewyVIII_53 Start: 31497, Stop: 32314, Start Num: 6

Candidate Starts for ChewyVIII_53:

(Start: 6 @31497 has 39 MA's), (19, 31674), (21, 31710), (26, 31764), (27, 31803), (35, 31887), (37, 31902), (52, 32127),

Gene: CoffeeBean_42 Start: 24265, Stop: 25088, Start Num: 6

Candidate Starts for CoffeeBean_42:

(1, 23878), (2, 23902), (Start: 6 @24265 has 39 MA's), (11, 24364), (13, 24388), (14, 24394), (26, 24520), (27, 24553), (44, 24763), (53, 24910), (62, 25063),

Gene: Commandaria_40 Start: 23900, Stop: 24714, Start Num: 6

Candidate Starts for Commandaria_40:

(Start: 6 @23900 has 39 MA's), (14, 24032), (25, 24146), (26, 24158), (27, 24191), (29, 24239), (36, 24281), (42, 24380), (62, 24692),

Gene: Dalilpop_43 Start: 24905, Stop: 25716, Start Num: 6

Candidate Starts for Dalilpop_43:

(Start: 6 @24905 has 39 MA's), (14, 25037), (21, 25109), (24, 25139), (26, 25163), (27, 25196), (31, 25265), (34, 25277), (48, 25451), (62, 25694),

Gene: Emianna_38 Start: 23597, Stop: 24402, Start Num: 6

Candidate Starts for Emianna_38:

(Start: 6 @23597 has 39 MA's), (14, 23729), (18, 23765), (23, 23810), (26, 23855), (27, 23888), (36, 23978), (56, 24272), (62, 24380),

Gene: Ennea_44 Start: 24223, Stop: 25034, Start Num: 6

Candidate Starts for Ennea_44:

(Start: 6 @24223 has 39 MA's), (14, 24355), (22, 24433), (23, 24436), (26, 24481), (31, 24583), (34, 24595), (62, 25012),

Gene: Flapper_42 Start: 23966, Stop: 24777, Start Num: 6

Candidate Starts for Flapper_42:

(Start: 6 @23966 has 39 MA's), (14, 24098), (21, 24170), (24, 24200), (26, 24224), (27, 24257), (31, 24326), (34, 24338), (36, 24347), (48, 24512), (52, 24584), (56, 24647), (62, 24755),

Gene: Float294_40 Start: 23662, Stop: 24473, Start Num: 6

Candidate Starts for Float294_40:

(Start: 6 @23662 has 39 MA's), (14, 23794), (22, 23872), (23, 23875), (26, 23920), (31, 24022), (34, 24034), (43, 24154), (62, 24451),

Gene: Foxboro_39 Start: 24103, Stop: 24908, Start Num: 6

Candidate Starts for Foxboro_39:

(Start: 6 @24103 has 39 MA's), (14, 24235), (18, 24271), (23, 24316), (26, 24361), (27, 24394), (36, 24484), (56, 24778), (62, 24886),

Gene: Fury_47 Start: 23325, Stop: 24127, Start Num: 6

Candidate Starts for Fury_47:

(Start: 6 @23325 has 39 MA's), (14, 23457), (26, 23583), (27, 23616), (28, 23640), (49, 23868), (57, 24042), (62, 24105),

Gene: GRU1_27 Start: 15854, Stop: 16665, Start Num: 6

Candidate Starts for GRU1_27:

(Start: 6 @15854 has 39 MA's), (14, 15986), (21, 16058), (24, 16088), (26, 16112), (27, 16145), (31, 16214), (34, 16226), (40, 16280), (48, 16400), (49, 16403), (62, 16643),

Gene: GTE5_28 Start: 16818, Stop: 17629, Start Num: 6

Candidate Starts for GTE5_28:

(Start: 6 @16818 has 39 MA's), (14, 16950), (21, 17022), (24, 17052), (26, 17076), (27, 17109), (31, 17178), (34, 17190), (46, 17352), (48, 17364), (56, 17499), (62, 17607),

Gene: GTE8_27 Start: 16862, Stop: 17667, Start Num: 6

Candidate Starts for GTE8_27:

(Start: 6 @16862 has 39 MA's), (14, 16994), (18, 17030), (20, 17063), (23, 17075), (25, 17108), (26, 17120), (27, 17153), (36, 17243), (43, 17354), (60, 17618), (62, 17645),

Gene: GrootJr_40 Start: 22976, Stop: 23778, Start Num: 6

Candidate Starts for GrootJr_40:

(Start: 6 @22976 has 39 MA's), (14, 23108), (18, 23144), (23, 23189), (26, 23234), (27, 23267), (36, 23357), (62, 23756),

Gene: GuyFagieri_42 Start: 24140, Stop: 24963, Start Num: 6

Candidate Starts for GuyFagieri_42:

(Start: 6 @24140 has 39 MA's), (11, 24239), (13, 24263), (14, 24269), (26, 24395), (27, 24428), (50, 24692), (51, 24707), (62, 24938),

Gene: HubbaBubba_36 Start: 19355, Stop: 20163, Start Num: 5

Candidate Starts for HubbaBubba_36:

(Start: 5 @19355 has 8 MA's), (9, 19430), (14, 19490), (17, 19517), (26, 19616), (30, 19709), (36, 19739), (62, 20141),

Gene: IDyn_39 Start: 20751, Stop: 21559, Start Num: 5

Candidate Starts for IDyn_39:

(Start: 5 @20751 has 8 MA's), (9, 20826), (14, 20886), (17, 20913), (26, 21012), (30, 21105), (36, 21135), (62, 21537),

Gene: Jifall16_37 Start: 23251, Stop: 24056, Start Num: 6

Candidate Starts for Jifall16_37:

(Start: 6 @23251 has 39 MA's), (14, 23383), (18, 23419), (23, 23464), (26, 23509), (27, 23542), (36, 23632), (56, 23926), (62, 24034),

Gene: Kabluna_41 Start: 22320, Stop: 23125, Start Num: 6

Candidate Starts for Kabluna_41:

(Start: 6 @22320 has 39 MA's), (14, 22452), (22, 22530), (26, 22578), (41, 22758),

Gene: KidneyBean_38 Start: 23375, Stop: 24177, Start Num: 6

Candidate Starts for KidneyBean_38:

(Start: 6 @23375 has 39 MA's), (14, 23507), (18, 23543), (23, 23588), (26, 23633), (27, 23666), (36, 23756), (43, 23867), (55, 24038), (56, 24047), (59, 24125), (62, 24155),

Gene: Kurt_38 Start: 23612, Stop: 24417, Start Num: 6

Candidate Starts for Kurt_38:

(Start: 6 @23612 has 39 MA's), (14, 23744), (18, 23780), (23, 23825), (26, 23870), (27, 23903), (36, 23993), (56, 24287), (62, 24395),

Gene: Lollipop1437_43 Start: 24211, Stop: 25022, Start Num: 6

Candidate Starts for Lollipop1437_43:

(Start: 6 @24211 has 39 MA's), (14, 24343), (22, 24421), (23, 24424), (26, 24469), (31, 24571), (34, 24583), (62, 25000),

Gene: MacGully_47 Start: 24813, Stop: 25627, Start Num: 6

Candidate Starts for MacGully_47:

(Start: 6 @24813 has 39 MA's), (14, 24942), (16, 24966), (17, 24969), (26, 25068), (32, 25173), (45, 25335), (47, 25347), (62, 25602),

Gene: Marietta_40 Start: 20667, Stop: 21475, Start Num: 5

Candidate Starts for Marietta_40:

(Start: 5 @20667 has 8 MA's), (9, 20742), (14, 20802), (17, 20829), (26, 20928), (30, 21021), (36, 21051), (62, 21453),

Gene: Maselop_42 Start: 24341, Stop: 25164, Start Num: 6

Candidate Starts for Maselop_42:

(1, 23954), (2, 23978), (Start: 6 @24341 has 39 MA's), (11, 24440), (13, 24464), (14, 24470), (26, 24596), (27, 24629), (44, 24839), (53, 24986), (62, 25139),

Gene: MerCougar_39 Start: 23519, Stop: 24324, Start Num: 6

Candidate Starts for MerCougar_39:

(Start: 6 @23519 has 39 MA's), (14, 23651), (26, 23777), (27, 23810), (36, 23900), (38, 23918),

Gene: Morgana_16 Start: 9973, Stop: 10925, Start Num: 3

Candidate Starts for Morgana_16:

(Start: 3 @9973 has 4 MA's), (4, 10105), (12, 10270), (14, 10279), (15, 10285), (24, 10393), (27, 10462), (33, 10537), (39, 10567),

Gene: NadineRae_38 Start: 19914, Stop: 20722, Start Num: 5

Candidate Starts for NadineRae_38:

(Start: 5 @19914 has 8 MA's), (9, 19989), (14, 20049), (17, 20076), (26, 20175), (30, 20268), (36, 20298), (54, 20562), (62, 20700),

Gene: NatB6_37 Start: 22648, Stop: 23453, Start Num: 6

Candidate Starts for NatB6_37:

(Start: 6 @22648 has 39 MA's), (14, 22780), (18, 22816), (23, 22861), (26, 22906), (27, 22939), (36, 23029), (56, 23323), (62, 23431),

Gene: NosilaM_41 Start: 23217, Stop: 24022, Start Num: 6

Candidate Starts for NosilaM_41:

(Start: 6 @23217 has 39 MA's), (14, 23349), (26, 23475),

Gene: NovumRegina_38 Start: 22975, Stop: 23777, Start Num: 6

Candidate Starts for NovumRegina_38:

(Start: 6 @22975 has 39 MA's), (14, 23107), (18, 23143), (23, 23188), (26, 23233), (27, 23266), (36, 23356), (62, 23755),

Gene: ObLaDi_16 Start: 9957, Stop: 10909, Start Num: 3

Candidate Starts for ObLaDi_16:

(Start: 3 @9957 has 4 MA's), (4, 10089), (7, 10143), (8, 10167), (10, 10209), (12, 10254), (24, 10377), (27, 10446), (39, 10551), (58, 10842),

Gene: Outis_39 Start: 23207, Stop: 24012, Start Num: 6

Candidate Starts for Outis_39:

(Start: 6 @23207 has 39 MA's), (14, 23339), (22, 23417), (26, 23465), (36, 23588), (38, 23606),

Gene: Patio_41 Start: 23447, Stop: 24258, Start Num: 6

Candidate Starts for Patio_41:

(Start: 6 @23447 has 39 MA's), (14, 23579), (22, 23657), (23, 23660), (26, 23705), (31, 23807), (34, 23819), (62, 24236),

Gene: Pleakley_47 Start: 23326, Stop: 24128, Start Num: 6

Candidate Starts for Pleakley_47:

(Start: 6 @23326 has 39 MA's), (14, 23458), (26, 23584), (27, 23617), (28, 23641), (49, 23869), (57, 24043), (62, 24106),

Gene: Polyzuki_42 Start: 24333, Stop: 25153, Start Num: 6

Candidate Starts for Polyzuki_42:

(1, 23946), (2, 23970), (Start: 6 @24333 has 39 MA's), (11, 24432), (13, 24456), (14, 24462), (26, 24588), (27, 24621), (53, 24975), (62, 25128),

Gene: RedRaider_45 Start: 25472, Stop: 26283, Start Num: 6

Candidate Starts for RedRaider_45:

(Start: 6 @25472 has 39 MA's), (14, 25604), (23, 25685), (26, 25730), (31, 25832), (34, 25844), (43, 25964), (62, 26261),

Gene: Skysand_40 Start: 23664, Stop: 24475, Start Num: 6

Candidate Starts for Skysand_40:

(Start: 6 @23664 has 39 MA's), (14, 23796), (22, 23874), (23, 23877), (26, 23922), (31, 24024), (34, 24036), (43, 24156), (62, 24453),

Gene: StarStruck_39 Start: 23207, Stop: 24012, Start Num: 6

Candidate Starts for StarStruck_39:

(Start: 6 @23207 has 39 MA's), (14, 23339), (22, 23417), (26, 23465), (36, 23588), (38, 23606),

Gene: Sukkupi_40 Start: 22228, Stop: 23036, Start Num: 5

Candidate Starts for Sukkupi_40:

(Start: 5 @22228 has 8 MA's), (9, 22303), (14, 22363), (17, 22390), (26, 22489), (30, 22582), (36, 22612), (62, 23014),

Gene: SuperSulley_39 Start: 23405, Stop: 24210, Start Num: 6

Candidate Starts for SuperSulley_39:

(Start: 6 @23405 has 39 MA's), (14, 23537), (26, 23663),

Gene: Tracker_38 Start: 22375, Stop: 23180, Start Num: 6

Candidate Starts for Tracker_38:

(Start: 6 @22375 has 39 MA's), (14, 22507), (18, 22543), (23, 22588), (26, 22633), (27, 22666), (36, 22756), (56, 23050), (62, 23158),

Gene: Turuncu_42 Start: 23671, Stop: 24482, Start Num: 6

Candidate Starts for Turuncu_42:

(Start: 6 @23671 has 39 MA's), (14, 23803), (21, 23875), (24, 23905), (26, 23929), (27, 23962), (31, 24031), (34, 24043), (48, 24217), (56, 24352), (62, 24460),

Gene: Wheezy_38 Start: 22580, Stop: 23385, Start Num: 6

Candidate Starts for Wheezy_38:

(Start: 6 @22580 has 39 MA's), (14, 22712), (18, 22748), (23, 22793), (26, 22838), (27, 22871), (36, 22961), (56, 23255), (62, 23363),

Gene: WhoseManz_40 Start: 20280, Stop: 21088, Start Num: 5

Candidate Starts for WhoseManz_40:

(Start: 5 @20280 has 8 MA's), (9, 20355), (14, 20415), (17, 20442), (26, 20541), (30, 20634), (36, 20664), (62, 21066),

Gene: Yndexa_40 Start: 22228, Stop: 23036, Start Num: 5

Candidate Starts for Yndexa_40:

(Start: 5 @22228 has 8 MA's), (9, 22303), (14, 22363), (17, 22390), (26, 22489), (30, 22582), (36, 22612), (62, 23014),