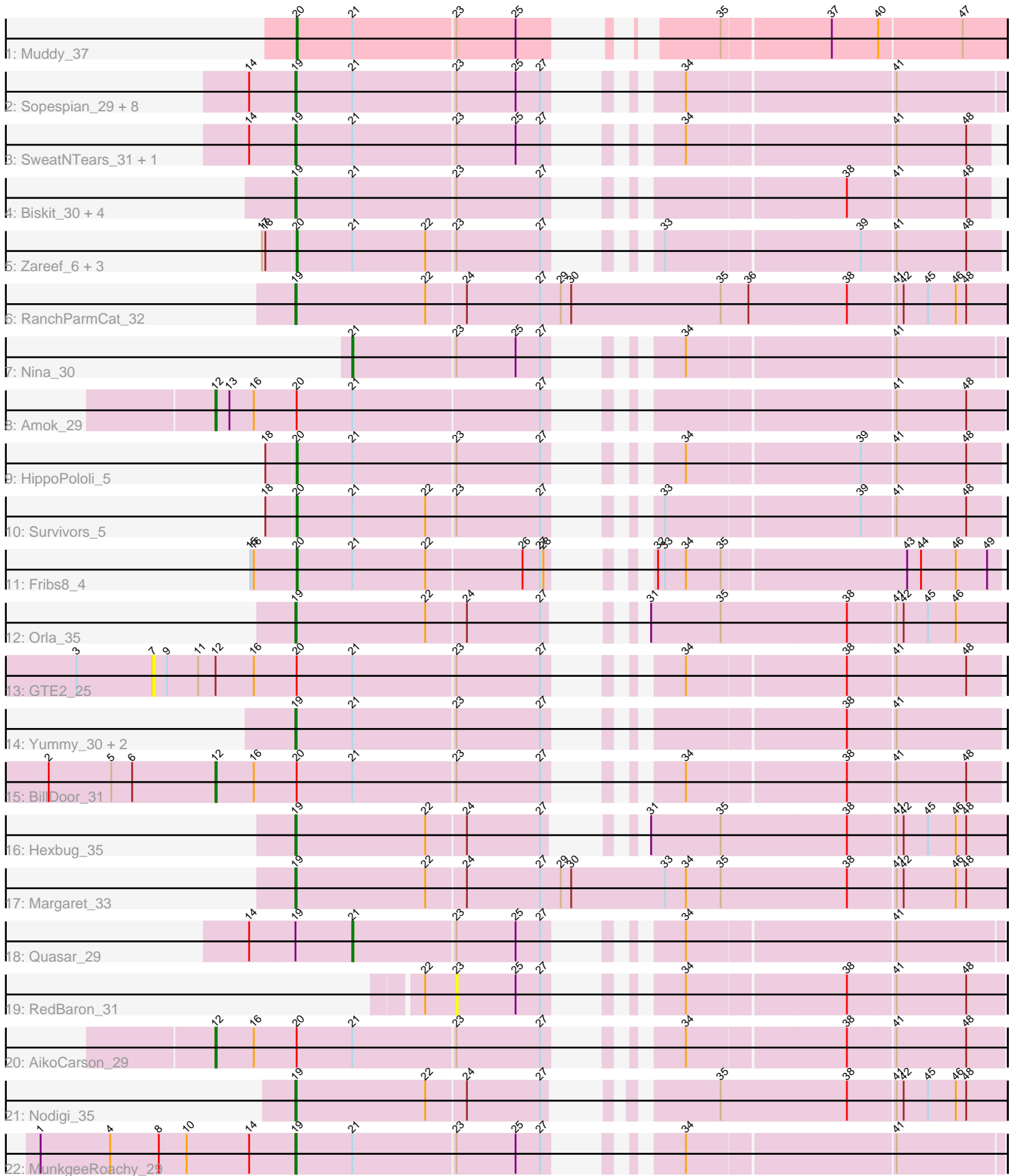


Pham 224719



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 224719 Report

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

Pham number 224719 has 40 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Muddy_37
- Track 2 : Sopespian_29, Axym_29, Starburst_30, Socotra_30, Burnsey_29, Agatha_29, PsychoKiller_29, Elliott_29, GoldHunter_30
- Track 3 : SweatNTears_31, Carsonalex_38
- Track 4 : Biskit_30, Buttrmlkdreams_29, Blondies_29, SketchMex_28, MScarn_31
- Track 5 : Zareef_6, MaVan_5, Azira_5, Nibbles_5
- Track 6 : RanchParmCat_32
- Track 7 : Nina_30
- Track 8 : Amok_29
- Track 9 : HippoPololi_5
- Track 10 : Survivors_5
- Track 11 : Fribs8_4
- Track 12 : Orla_35
- Track 13 : GTE2_25
- Track 14 : Yummy_30, Horseradish_30, Troje_29
- Track 15 : BillDoor_31
- Track 16 : Hexbug_35
- Track 17 : Margaret_33
- Track 18 : Quasar_29
- Track 19 : RedBaron_31
- Track 20 : AikoCarson_29
- Track 21 : Nodigi_35
- Track 22 : MunkgeeRoachy_29

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

The start number called the most often in the published annotations is 19, it was called in 17 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_29, Axym_29, Biskit_30, Blondies_29, Burnsey_29, Buttrmlkdreams_29, Carsonalex_38, Elliott_29, GoldHunter_30, Hexbug_35, Horseradish_30, MScarn_31, Margaret_33, MunkgeeRoachy_29, Nodigi_35, Orla_35, PsychoKiller_29, RanchParmCat_32, SketchMex_28, Socotra_30, Sopespian_29, Starburst_30,

SweatNTears_31, Troje_29, Yummy_30,

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

- Quasar_29,

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

- AikoCarson_29, Amok_29, Azira_5, BillDoor_31, Fribs8_4, GTE2_25, HippoPololi_5, MaVan_5, Muddy_37, Nibbles_5, Nina_30, RedBaron_31, Survivors_5, Zareef_6,

Summary by start number:

Start 7:

- Found in 1 of 40 (2.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GTE2_25 (CT),

Start 12:

- Found in 4 of 40 (10.0%) of genes in pham
- Manual Annotations of this start: 3 of 29
- Called 75.0% of time when present
- Phage (with cluster) where this start called: AikoCarson_29 (CT), Amok_29 (CT), BillDoor_31 (CT),

Start 19:

- Found in 26 of 40 (65.0%) of genes in pham
- Manual Annotations of this start: 17 of 29
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Agatha_29 (CT), Axym_29 (CT), Biskit_30 (CT), Blondies_29 (CT), Burnsey_29 (CT), Buttrmlkdreams_29 (CT), Carsonalex_38 (CT), Elliott_29 (CT), GoldHunter_30 (CT), Hexbug_35 (CT), Horseradish_30 (CT), MScarn_31 (CT), Margaret_33 (CT), MunkgeeRoachy_29 (CT), Nodigi_35 (CT), Orla_35 (CT), PsychoKiller_29 (CT), RanchParmCat_32 (CT), SketchMex_28 (CT), Socotra_30 (CT), Sopespian_29 (CT), Starburst_30 (CT), SweatNTears_31 (CT), Troje_29 (CT), Yummy_30 (CT),

Start 20:

- Found in 12 of 40 (30.0%) of genes in pham
- Manual Annotations of this start: 7 of 29
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Azira_5 (CT), Fribs8_4 (CT), HippoPololi_5 (CT), MaVan_5 (CT), Muddy_37 (AB), Nibbles_5 (CT), Survivors_5 (CT), Zareef_6 (CT),

Start 21:

- Found in 34 of 40 (85.0%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Nina_30 (CT), Quasar_29 (CT),

Start 23:

- Found in 33 of 40 (82.5%) of genes in pham

- No Manual Annotations of this start.
- Called 3.0% of time when present
- Phage (with cluster) where this start called: RedBaron_31 (CT),

Summary by clusters:

There are 2 clusters represented in this pham: AB, CT,

Info for manual annotations of cluster AB:

- Start number 20 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster CT:

- Start number 12 was manually annotated 3 times for cluster CT.
- Start number 19 was manually annotated 17 times for cluster CT.
- Start number 20 was manually annotated 6 times for cluster CT.
- Start number 21 was manually annotated 2 times for cluster CT.

Gene Information:

Gene: Agatha_29 Start: 24040, Stop: 23519, Start Num: 19

Candidate Starts for Agatha_29:

(14, 24079), (Start: 19 @24040 has 17 MA's), (Start: 21 @23992 has 2 MA's), (23, 23905), (25, 23854), (27, 23833), (34, 23782), (41, 23608),

Gene: AikoCarson_29 Start: 23776, Stop: 23186, Start Num: 12

Candidate Starts for AikoCarson_29:

(Start: 12 @23776 has 3 MA's), (16, 23743), (Start: 20 @23707 has 7 MA's), (Start: 21 @23659 has 2 MA's), (23, 23572), (27, 23500), (34, 23449), (38, 23317), (41, 23278), (48, 23218),

Gene: Amok_29 Start: 23735, Stop: 23145, Start Num: 12

Candidate Starts for Amok_29:

(Start: 12 @23735 has 3 MA's), (13, 23723), (16, 23702), (Start: 20 @23666 has 7 MA's), (Start: 21 @23618 has 2 MA's), (27, 23459), (41, 23237), (48, 23177),

Gene: Axym_29 Start: 24040, Stop: 23522, Start Num: 19

Candidate Starts for Axym_29:

(14, 24079), (Start: 19 @24040 has 17 MA's), (Start: 21 @23992 has 2 MA's), (23, 23905), (25, 23854), (27, 23833), (34, 23782), (41, 23611),

Gene: Azira_5 Start: 1392, Stop: 1910, Start Num: 20

Candidate Starts for Azira_5:

(17, 1365), (18, 1368), (Start: 20 @1392 has 7 MA's), (Start: 21 @1440 has 2 MA's), (22, 1503), (23, 1527), (27, 1599), (33, 1632), (39, 1794), (41, 1821), (48, 1881),

Gene: BillDoor_31 Start: 23789, Stop: 23202, Start Num: 12

Candidate Starts for BillDoor_31:

(2, 23933), (5, 23879), (6, 23861), (Start: 12 @23789 has 3 MA's), (16, 23756), (Start: 20 @23720 has 7 MA's), (Start: 21 @23672 has 2 MA's), (23, 23585), (27, 23513), (34, 23462), (38, 23330), (41, 23291), (48, 23231),

Gene: Biskit_30 Start: 23670, Stop: 23161, Start Num: 19

Candidate Starts for Biskit_30:

(Start: 19 @23670 has 17 MA's), (Start: 21 @23622 has 2 MA's), (23, 23535), (27, 23463), (38, 23280), (41, 23241), (48, 23181),

Gene: Blondies_29 Start: 23653, Stop: 23144, Start Num: 19

Candidate Starts for Blondies_29:

(Start: 19 @23653 has 17 MA's), (Start: 21 @23605 has 2 MA's), (23, 23518), (27, 23446), (38, 23263), (41, 23224), (48, 23164),

Gene: Burnsey_29 Start: 24032, Stop: 23514, Start Num: 19

Candidate Starts for Burnsey_29:

(14, 24071), (Start: 19 @24032 has 17 MA's), (Start: 21 @23984 has 2 MA's), (23, 23897), (25, 23846), (27, 23825), (34, 23774), (41, 23603),

Gene: Buttrmlkdreams_29 Start: 23652, Stop: 23143, Start Num: 19

Candidate Starts for Buttrmlkdreams_29:

(Start: 19 @23652 has 17 MA's), (Start: 21 @23604 has 2 MA's), (23, 23517), (27, 23445), (38, 23262), (41, 23223), (48, 23163),

Gene: Carsonalex_38 Start: 25842, Stop: 26363, Start Num: 19

Candidate Starts for Carsonalex_38:

(14, 25803), (Start: 19 @25842 has 17 MA's), (Start: 21 @25890 has 2 MA's), (23, 25977), (25, 26028), (27, 26049), (34, 26100), (41, 26271), (48, 26331),

Gene: Elliott_29 Start: 24040, Stop: 23522, Start Num: 19

Candidate Starts for Elliott_29:

(14, 24079), (Start: 19 @24040 has 17 MA's), (Start: 21 @23992 has 2 MA's), (23, 23905), (25, 23854), (27, 23833), (34, 23782), (41, 23611),

Gene: Fribs8_4 Start: 1183, Stop: 1704, Start Num: 20

Candidate Starts for Fribs8_4:

(15, 1144), (16, 1147), (Start: 20 @1183 has 7 MA's), (Start: 21 @1231 has 2 MA's), (22, 1294), (26, 1375), (27, 1390), (28, 1393), (32, 1417), (33, 1423), (34, 1441), (35, 1471), (43, 1624), (44, 1636), (46, 1666), (49, 1693),

Gene: GTE2_25 Start: 23569, Stop: 22928, Start Num: 7

Candidate Starts for GTE2_25:

(3, 23635), (7, 23569), (9, 23557), (11, 23530), (Start: 12 @23515 has 3 MA's), (16, 23482), (Start: 20 @23446 has 7 MA's), (Start: 21 @23398 has 2 MA's), (23, 23311), (27, 23239), (34, 23188), (38, 23056), (41, 23017), (48, 22957),

Gene: GoldHunter_30 Start: 24041, Stop: 23523, Start Num: 19

Candidate Starts for GoldHunter_30:

(14, 24080), (Start: 19 @24041 has 17 MA's), (Start: 21 @23993 has 2 MA's), (23, 23906), (25, 23855), (27, 23834), (34, 23783), (41, 23612),

Gene: Hexbug_35 Start: 25804, Stop: 25274, Start Num: 19

Candidate Starts for Hexbug_35:

(Start: 19 @25804 has 17 MA's), (22, 25693), (24, 25660), (27, 25597), (31, 25576), (35, 25516), (38, 25408), (41, 25369), (42, 25363), (45, 25342), (46, 25318), (48, 25309),

Gene: HippoPololi_5 Start: 1270, Stop: 1788, Start Num: 20

Candidate Starts for HippoPololi_5:

(18, 1246), (Start: 20 @1270 has 7 MA's), (Start: 21 @1318 has 2 MA's), (23, 1405), (27, 1477), (34, 1528), (39, 1672), (41, 1699), (48, 1759),

Gene: Horseradish_30 Start: 23515, Stop: 22997, Start Num: 19

Candidate Starts for Horseradish_30:

(Start: 19 @23515 has 17 MA's), (Start: 21 @23467 has 2 MA's), (23, 23380), (27, 23308), (38, 23125), (41, 23086),

Gene: MScarn_31 Start: 23655, Stop: 23146, Start Num: 19

Candidate Starts for MScarn_31:

(Start: 19 @23655 has 17 MA's), (Start: 21 @23607 has 2 MA's), (23, 23520), (27, 23448), (38, 23265), (41, 23226), (48, 23166),

Gene: MaVan_5 Start: 1393, Stop: 1911, Start Num: 20

Candidate Starts for MaVan_5:

(17, 1366), (18, 1369), (Start: 20 @1393 has 7 MA's), (Start: 21 @1441 has 2 MA's), (22, 1504), (23, 1528), (27, 1600), (33, 1633), (39, 1795), (41, 1822), (48, 1882),

Gene: Margaret_33 Start: 24194, Stop: 23589, Start Num: 19

Candidate Starts for Margaret_33:

(Start: 19 @24194 has 17 MA's), (22, 24083), (24, 24050), (27, 23987), (29, 23969), (30, 23960), (33, 23879), (34, 23861), (35, 23831), (38, 23723), (41, 23684), (42, 23678), (46, 23633), (48, 23624),

Gene: Muddy_37 Start: 28284, Stop: 28796, Start Num: 20

Candidate Starts for Muddy_37:

(Start: 20 @28284 has 7 MA's), (Start: 21 @28332 has 2 MA's), (23, 28419), (25, 28470), (35, 28560), (37, 28650), (40, 28689), (47, 28758),

Gene: MunkgeeRoachy_29 Start: 24118, Stop: 23600, Start Num: 19

Candidate Starts for MunkgeeRoachy_29:

(1, 24337), (4, 24277), (8, 24235), (10, 24211), (14, 24157), (Start: 19 @24118 has 17 MA's), (Start: 21 @24070 has 2 MA's), (23, 23983), (25, 23932), (27, 23911), (34, 23860), (41, 23689),

Gene: Nibbles_5 Start: 1393, Stop: 1911, Start Num: 20

Candidate Starts for Nibbles_5:

(17, 1366), (18, 1369), (Start: 20 @1393 has 7 MA's), (Start: 21 @1441 has 2 MA's), (22, 1504), (23, 1528), (27, 1600), (33, 1633), (39, 1795), (41, 1822), (48, 1882),

Gene: Nina_30 Start: 25032, Stop: 24562, Start Num: 21

Candidate Starts for Nina_30:

(Start: 21 @25032 has 2 MA's), (23, 24945), (25, 24894), (27, 24873), (34, 24822), (41, 24651),

Gene: Nodigi_35 Start: 25770, Stop: 25240, Start Num: 19

Candidate Starts for Nodigi_35:

(Start: 19 @25770 has 17 MA's), (22, 25659), (24, 25626), (27, 25563), (35, 25482), (38, 25374), (41, 25335), (42, 25329), (45, 25308), (46, 25284), (48, 25275),

Gene: Orla_35 Start: 25777, Stop: 25247, Start Num: 19

Candidate Starts for Orla_35:

(Start: 19 @25777 has 17 MA's), (22, 25666), (24, 25633), (27, 25570), (31, 25549), (35, 25489), (38, 25381), (41, 25342), (42, 25336), (45, 25315), (46, 25291),

Gene: PsychoKiller_29 Start: 24040, Stop: 23522, Start Num: 19

Candidate Starts for PsychoKiller_29:

(14, 24079), (Start: 19 @24040 has 17 MA's), (Start: 21 @23992 has 2 MA's), (23, 23905), (25, 23854), (27, 23833), (34, 23782), (41, 23611),

Gene: Quasar_29 Start: 24601, Stop: 24131, Start Num: 21

Candidate Starts for Quasar_29:

(14, 24688), (Start: 19 @24649 has 17 MA's), (Start: 21 @24601 has 2 MA's), (23, 24514), (25, 24463), (27, 24442), (34, 24391), (41, 24220),

Gene: RanchParmCat_32 Start: 24399, Stop: 23794, Start Num: 19

Candidate Starts for RanchParmCat_32:

(Start: 19 @24399 has 17 MA's), (22, 24288), (24, 24255), (27, 24192), (29, 24174), (30, 24165), (35, 24036), (36, 24012), (38, 23928), (41, 23889), (42, 23883), (45, 23862), (46, 23838), (48, 23829),

Gene: RedBaron_31 Start: 24288, Stop: 23902, Start Num: 23

Candidate Starts for RedBaron_31:

(22, 24315), (23, 24288), (25, 24237), (27, 24216), (34, 24165), (38, 24033), (41, 23994), (48, 23934),

Gene: SketchMex_28 Start: 23670, Stop: 23161, Start Num: 19

Candidate Starts for SketchMex_28:

(Start: 19 @23670 has 17 MA's), (Start: 21 @23622 has 2 MA's), (23, 23535), (27, 23463), (38, 23280), (41, 23241), (48, 23181),

Gene: Socotra_30 Start: 24040, Stop: 23522, Start Num: 19

Candidate Starts for Socotra_30:

(14, 24079), (Start: 19 @24040 has 17 MA's), (Start: 21 @23992 has 2 MA's), (23, 23905), (25, 23854), (27, 23833), (34, 23782), (41, 23611),

Gene: Sopespian_29 Start: 24041, Stop: 23523, Start Num: 19

Candidate Starts for Sopespian_29:

(14, 24080), (Start: 19 @24041 has 17 MA's), (Start: 21 @23993 has 2 MA's), (23, 23906), (25, 23855), (27, 23834), (34, 23783), (41, 23612),

Gene: Starburst_30 Start: 24041, Stop: 23523, Start Num: 19

Candidate Starts for Starburst_30:

(14, 24080), (Start: 19 @24041 has 17 MA's), (Start: 21 @23993 has 2 MA's), (23, 23906), (25, 23855), (27, 23834), (34, 23783), (41, 23612),

Gene: Survivors_5 Start: 1247, Stop: 1765, Start Num: 20

Candidate Starts for Survivors_5:

(18, 1223), (Start: 20 @1247 has 7 MA's), (Start: 21 @1295 has 2 MA's), (22, 1358), (23, 1382), (27, 1454), (33, 1487), (39, 1649), (41, 1676), (48, 1736),

Gene: SweatNTears_31 Start: 23938, Stop: 23429, Start Num: 19

Candidate Starts for SweatNTears_31:

(14, 23977), (Start: 19 @23938 has 17 MA's), (Start: 21 @23890 has 2 MA's), (23, 23803), (25, 23752), (27, 23731), (34, 23680), (41, 23509), (48, 23449),

Gene: Troje_29 Start: 23676, Stop: 23158, Start Num: 19

Candidate Starts for Troje_29:

(Start: 19 @23676 has 17 MA's), (Start: 21 @23628 has 2 MA's), (23, 23541), (27, 23469), (38, 23286), (41, 23247),

Gene: Yummy_30 Start: 23629, Stop: 23111, Start Num: 19

Candidate Starts for Yummy_30:

(Start: 19 @23629 has 17 MA's), (Start: 21 @23581 has 2 MA's), (23, 23494), (27, 23422), (38, 23239), (41, 23200),

Gene: Zareef_6 Start: 1393, Stop: 1911, Start Num: 20

Candidate Starts for Zareef_6:

(17, 1366), (18, 1369), (Start: 20 @1393 has 7 MA's), (Start: 21 @1441 has 2 MA's), (22, 1504), (23, 1528), (27, 1600), (33, 1633), (39, 1795), (41, 1822), (48, 1882),