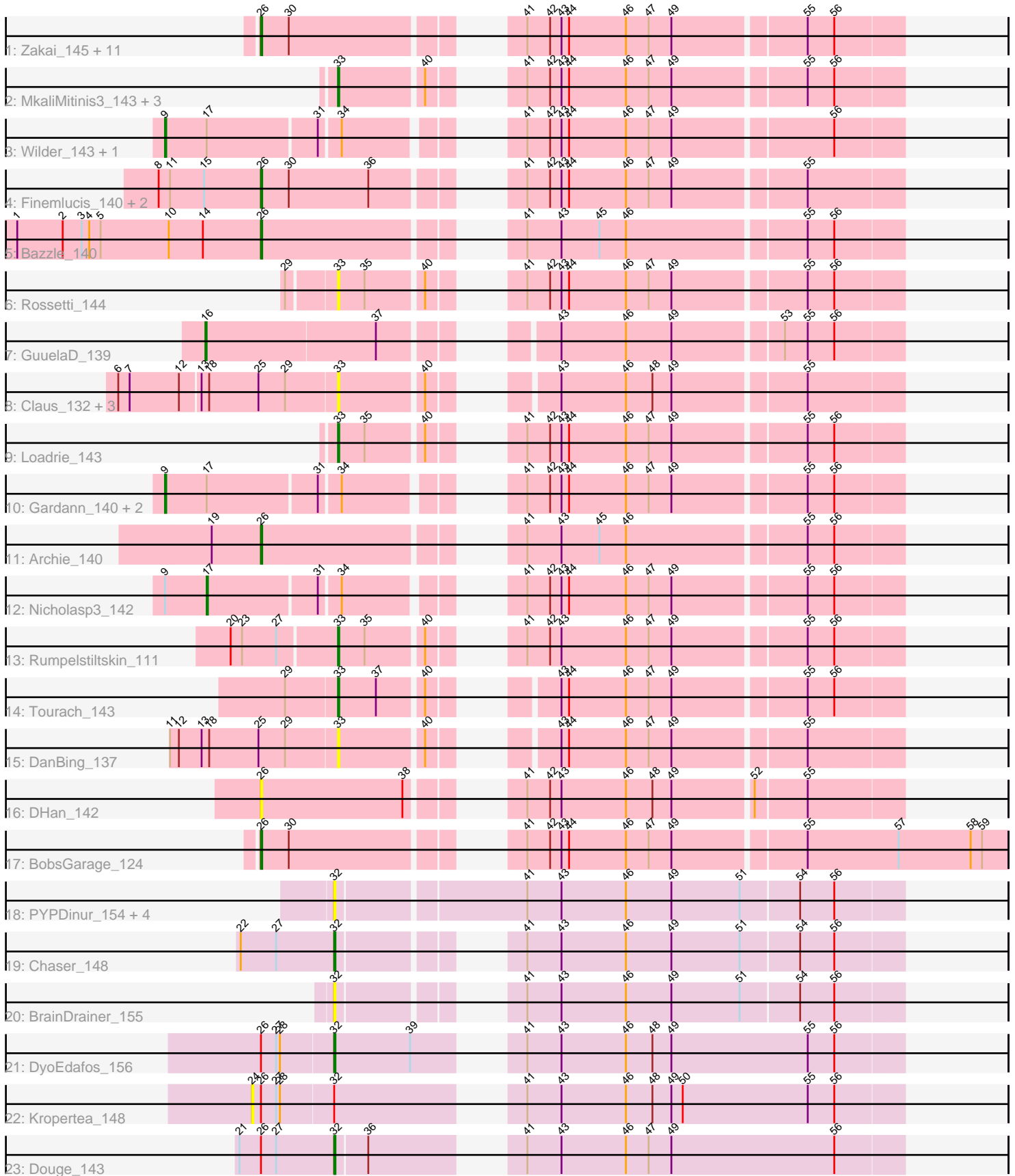


Pham 224664



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 224664 Report

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

Pham number 224664 has 49 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Zakai_145, Netyap_142, Itos_144, Lewan_143, Sarshaun_134, Soap141_142, Breezona_143, DrSeegs_140, BigCheese_138, Miley16_143, Faith1_140, Winky_143
- Track 2 : MkaliMitinis3_143, Crossroads_144, Wigglewiggles_144, Vetrix_140
- Track 3 : Wilder_143, Kahlid_141
- Track 4 : Finemlucis_140, SoJulia_147, Gabriela_142
- Track 5 : Bazzle_140
- Track 6 : Rossetti_144
- Track 7 : GuuelaD_139
- Track 8 : Claus_132, ZhongYanYuan_140, Hafay_110, Baoshan_128
- Track 9 : Loadrie_143
- Track 10 : Gardann_140, LilDestine_139, Underpass_131
- Track 11 : Archie_140
- Track 12 : Nicholasp3_142
- Track 13 : Rumpelstiltskin_111
- Track 14 : Tourach_143
- Track 15 : DanBing_137
- Track 16 : DHan_142
- Track 17 : BobsGarage_124
- Track 18 : PYPDinur_154, Quby_155, Douzhi_155, FarmResident_154, Sheng711_154
- Track 19 : Chaser_148
- Track 20 : BrainDrainer_155
- Track 21 : DyoEdafos_156
- Track 22 : Kropertea_148
- Track 23 : Douge_143

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

The start number called the most often in the published annotations is 26, it was called in 15 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archie_140, Bazzle_140, BigCheese_138, BobsGarage_124, Breezona_143, DHan_142, DrSeegs_140, Faith1_140, Finemlucis_140, Gabriela_142, Itos_144, Lewan_143, Miley16_143, Netyap_142, Sarshaun_134, SoJulia_147, Soap141_142, Winky_143, Zakai_145,

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

- Douge_143, DyoEdafos_156, Kropertea_148,

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

- Baoshan_128, BrainDrainer_155, Chaser_148, Claus_132, Crossroads_144, DanBing_137, Douzhi_155, FarmResident_154, Gardann_140, GuuelaD_139, Hafay_110, Kahlid_141, LilDestine_139, Loadrie_143, MkaliMitinis3_143, Nicholasp3_142, PYPDinur_154, Quby_155, Rossetti_144, Rumpelstiltskin_111, Sheng711_154, Tourach_143, Underpass_131, Vetrix_140, Wigglewiggle_144, Wilder_143, ZhongYanYuan_140,

Summary by start number:

Start 9:

- Found in 6 of 49 (12.2%) of genes in pham
- Manual Annotations of this start: 4 of 31
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Gardann_140 (L2), Kahlid_141 (L2), LilDestine_139 (L2), Underpass_131 (L2), Wilder_143 (L2),

Start 16:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GuuelaD_139 (L2),

Start 17:

- Found in 6 of 49 (12.2%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Nicholasp3_142 (L2),

Start 24:

- Found in 1 of 49 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kropertea_148 (L4),

Start 26:

- Found in 22 of 49 (44.9%) of genes in pham
- Manual Annotations of this start: 15 of 31
- Called 86.4% of time when present
- Phage (with cluster) where this start called: Archie_140 (L2), Bazzle_140 (L2), BigCheese_138 (L2), BobsGarage_124 (L2), Breezona_143 (L2), DHan_142 (L2), DrSeegs_140 (L2), Faith1_140 (L2), Finemlucis_140 (L2), Gabriela_142 (L2), Itos_144 (L2), Lewan_143 (L2), Miley16_143 (L2), Netyap_142 (L2), Sarshaun_134 (L2), SoJulia_147 (L2), Soap141_142 (L2), Winky_143 (L2), Zakai_145 (L2),

Start 32:

- Found in 10 of 49 (20.4%) of genes in pham
- Manual Annotations of this start: 3 of 31
- Called 90.0% of time when present
- Phage (with cluster) where this start called: BrainDrainer_155 (L4), Chaser_148 (L4), Douge_143 (L4), Douzhi_155 (L4), DyoEdafos_156 (L4), FarmResident_154 (L4), PYPDinur_154 (L4), Quby_155 (L4), Sheng711_154 (L4),

Start 33:

- Found in 13 of 49 (26.5%) of genes in pham
- Manual Annotations of this start: 7 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Baoshan_128 (L2), Claus_132 (L2), Crossroads_144 (L2), DanBing_137 (L2), Hafay_110 (L2), Loadrie_143 (L2), MkaliMitinis3_143 (L2), Rossetti_144 (L2), Rumpelstiltskin_111 (L2), Tourach_143 (L2), Vetrix_140 (L2), Wigglewiggles_144 (L2), ZhongYanYuan_140 (L2),

Summary by clusters:

There are 2 clusters represented in this pham: L4, L2,

Info for manual annotations of cluster L2:

- Start number 9 was manually annotated 4 times for cluster L2.
- Start number 16 was manually annotated 1 time for cluster L2.
- Start number 17 was manually annotated 1 time for cluster L2.
- Start number 26 was manually annotated 15 times for cluster L2.
- Start number 33 was manually annotated 7 times for cluster L2.

Info for manual annotations of cluster L4:

- Start number 32 was manually annotated 3 times for cluster L4.

Gene Information:

Gene: Archie_140 Start: 75399, Stop: 74956, Start Num: 26

Candidate Starts for Archie_140:

(19, 75438), (Start: 26 @75399 has 15 MA's), (41, 75240), (43, 75213), (45, 75183), (46, 75162), (55, 75027), (56, 75006),

Gene: Baoshan_128 Start: 70471, Stop: 70094, Start Num: 33

Candidate Starts for Baoshan_128:

(6, 70639), (7, 70630), (12, 70591), (13, 70576), (18, 70570), (25, 70531), (29, 70510), (Start: 33 @70471 has 7 MA's), (40, 70408), (43, 70351), (46, 70300), (48, 70279), (49, 70264), (55, 70165),

Gene: Bazzle_140 Start: 75896, Stop: 75453, Start Num: 26

Candidate Starts for Bazzle_140:

(1, 76088), (2, 76052), (3, 76037), (4, 76031), (5, 76022), (10, 75968), (14, 75941), (Start: 26 @75896 has 15 MA's), (41, 75737), (43, 75710), (45, 75680), (46, 75659), (55, 75524), (56, 75503),

Gene: BigCheese_138 Start: 71942, Stop: 71499, Start Num: 26

Candidate Starts for BigCheese_138:

(Start: 26 @71942 has 15 MA's), (30, 71921), (41, 71783), (42, 71765), (43, 71756), (44, 71750), (46, 71705), (47, 71687), (49, 71669), (55, 71570), (56, 71549),

Gene: BobsGarage_124 Start: 67234, Stop: 66704, Start Num: 26

Candidate Starts for BobsGarage_124:

(Start: 26 @67234 has 15 MA's), (30, 67213), (41, 67075), (42, 67057), (43, 67048), (44, 67042), (46, 66997), (47, 66979), (49, 66961), (55, 66862), (57, 66790), (58, 66733), (59, 66724),

Gene: BrainDrainer_155 Start: 76837, Stop: 76448, Start Num: 32

Candidate Starts for BrainDrainer_155:

(Start: 32 @76837 has 3 MA's), (41, 76738), (43, 76711), (46, 76660), (49, 76624), (51, 76570), (54, 76525), (56, 76498),

Gene: Breezona_143 Start: 75784, Stop: 75341, Start Num: 26

Candidate Starts for Breezona_143:

(Start: 26 @75784 has 15 MA's), (30, 75763), (41, 75625), (42, 75607), (43, 75598), (44, 75592), (46, 75547), (47, 75529), (49, 75511), (55, 75412), (56, 75391),

Gene: Chaser_148 Start: 75823, Stop: 75434, Start Num: 32

Candidate Starts for Chaser_148:

(22, 75895), (27, 75868), (Start: 32 @75823 has 3 MA's), (41, 75724), (43, 75697), (46, 75646), (49, 75610), (51, 75556), (54, 75511), (56, 75484),

Gene: Claus_132 Start: 71384, Stop: 71007, Start Num: 33

Candidate Starts for Claus_132:

(6, 71552), (7, 71543), (12, 71504), (13, 71489), (18, 71483), (25, 71444), (29, 71423), (Start: 33 @71384 has 7 MA's), (40, 71321), (43, 71264), (46, 71213), (48, 71192), (49, 71177), (55, 71078),

Gene: Crossroads_144 Start: 75286, Stop: 74903, Start Num: 33

Candidate Starts for Crossroads_144:

(Start: 33 @75286 has 7 MA's), (40, 75223), (41, 75187), (42, 75169), (43, 75160), (44, 75154), (46, 75109), (47, 75091), (49, 75073), (55, 74974), (56, 74953),

Gene: DHan_142 Start: 75640, Stop: 75197, Start Num: 26

Candidate Starts for DHan_142:

(Start: 26 @75640 has 15 MA's), (38, 75529), (41, 75481), (42, 75463), (43, 75454), (46, 75403), (48, 75382), (49, 75367), (52, 75307), (55, 75268),

Gene: DanBing_137 Start: 71647, Stop: 71270, Start Num: 33

Candidate Starts for DanBing_137:

(11, 71776), (12, 71770), (13, 71752), (18, 71746), (25, 71707), (29, 71686), (Start: 33 @71647 has 7 MA's), (40, 71584), (43, 71527), (44, 71521), (46, 71476), (47, 71458), (49, 71440), (55, 71341),

Gene: Douge_143 Start: 73698, Stop: 73297, Start Num: 32

Candidate Starts for Douge_143:

(21, 73770), (Start: 26 @73755 has 15 MA's), (27, 73743), (Start: 32 @73698 has 3 MA's), (36, 73674), (41, 73590), (43, 73563), (46, 73512), (47, 73494), (49, 73476), (56, 73347),

Gene: Douzhi_155 Start: 77003, Stop: 76614, Start Num: 32

Candidate Starts for Douzhi_155:

(Start: 32 @77003 has 3 MA's), (41, 76904), (43, 76877), (46, 76826), (49, 76790), (51, 76736), (54, 76691), (56, 76664),

Gene: DrSeegs_140 Start: 75784, Stop: 75341, Start Num: 26

Candidate Starts for DrSeegs_140:

(Start: 26 @75784 has 15 MA's), (30, 75763), (41, 75625), (42, 75607), (43, 75598), (44, 75592), (46, 75547), (47, 75529), (49, 75511), (55, 75412), (56, 75391),

Gene: DyoEdafos_156 Start: 76685, Stop: 76281, Start Num: 32

Candidate Starts for DyoEdafos_156:

(Start: 26 @76739 has 15 MA's), (27, 76727), (28, 76724), (Start: 32 @76685 has 3 MA's), (39, 76625), (41, 76574), (43, 76547), (46, 76496), (48, 76475), (49, 76460), (55, 76352), (56, 76331),

Gene: Faith1_140 Start: 75092, Stop: 74649, Start Num: 26

Candidate Starts for Faith1_140:

(Start: 26 @75092 has 15 MA's), (30, 75071), (41, 74933), (42, 74915), (43, 74906), (44, 74900), (46, 74855), (47, 74837), (49, 74819), (55, 74720), (56, 74699),

Gene: FarmResident_154 Start: 76652, Stop: 76263, Start Num: 32

Candidate Starts for FarmResident_154:

(Start: 32 @76652 has 3 MA's), (41, 76553), (43, 76526), (46, 76475), (49, 76439), (51, 76385), (54, 76340), (56, 76313),

Gene: Finemlucis_140 Start: 76184, Stop: 75741, Start Num: 26

Candidate Starts for Finemlucis_140:

(8, 76265), (11, 76256), (15, 76229), (Start: 26 @76184 has 15 MA's), (30, 76163), (36, 76100), (41, 76025), (42, 76007), (43, 75998), (44, 75992), (46, 75947), (47, 75929), (49, 75911), (55, 75812),

Gene: Gabriela_142 Start: 74527, Stop: 74084, Start Num: 26

Candidate Starts for Gabriela_142:

(8, 74608), (11, 74599), (15, 74572), (Start: 26 @74527 has 15 MA's), (30, 74506), (36, 74443), (41, 74368), (42, 74350), (43, 74341), (44, 74335), (46, 74290), (47, 74272), (49, 74254), (55, 74155),

Gene: Gardann_140 Start: 75171, Stop: 74662, Start Num: 9

Candidate Starts for Gardann_140:

(Start: 9 @75171 has 4 MA's), (Start: 17 @75138 has 1 MA's), (31, 75054), (34, 75039), (41, 74946), (42, 74928), (43, 74919), (44, 74913), (46, 74868), (47, 74850), (49, 74832), (55, 74733), (56, 74712),

Gene: GuuelaD_139 Start: 75467, Stop: 74988, Start Num: 16

Candidate Starts for GuuelaD_139:

(Start: 16 @75467 has 1 MA's), (37, 75335), (43, 75245), (46, 75194), (49, 75158), (53, 75077), (55, 75059), (56, 75038),

Gene: Hafay_110 Start: 67215, Stop: 66838, Start Num: 33

Candidate Starts for Hafay_110:

(6, 67383), (7, 67374), (12, 67335), (13, 67320), (18, 67314), (25, 67275), (29, 67254), (Start: 33 @67215 has 7 MA's), (40, 67152), (43, 67095), (46, 67044), (48, 67023), (49, 67008), (55, 66909),

Gene: Itos_144 Start: 74069, Stop: 73626, Start Num: 26

Candidate Starts for Itos_144:

(Start: 26 @74069 has 15 MA's), (30, 74048), (41, 73910), (42, 73892), (43, 73883), (44, 73877), (46, 73832), (47, 73814), (49, 73796), (55, 73697), (56, 73676),

Gene: Kahlid_141 Start: 75085, Stop: 74576, Start Num: 9

Candidate Starts for Kahlid_141:

(Start: 9 @75085 has 4 MA's), (Start: 17 @75052 has 1 MA's), (31, 74968), (34, 74953), (41, 74860), (42, 74842), (43, 74833), (44, 74827), (46, 74782), (47, 74764), (49, 74746), (56, 74626),

Gene: Kropertea_148 Start: 76165, Stop: 75701, Start Num: 24

Candidate Starts for Kropertea_148:

(24, 76165), (Start: 26 @76159 has 15 MA's), (27, 76147), (28, 76144), (Start: 32 @76105 has 3 MA's), (41, 75994), (43, 75967), (46, 75916), (48, 75895), (49, 75880), (50, 75871), (55, 75772), (56, 75751),

Gene: Lewan_143 Start: 75891, Stop: 75448, Start Num: 26

Candidate Starts for Lewan_143:

(Start: 26 @75891 has 15 MA's), (30, 75870), (41, 75732), (42, 75714), (43, 75705), (44, 75699), (46, 75654), (47, 75636), (49, 75618), (55, 75519), (56, 75498),

Gene: LilDestine_139 Start: 74577, Stop: 74068, Start Num: 9

Candidate Starts for LilDestine_139:

(Start: 9 @74577 has 4 MA's), (Start: 17 @74544 has 1 MA's), (31, 74460), (34, 74445), (41, 74352), (42, 74334), (43, 74325), (44, 74319), (46, 74274), (47, 74256), (49, 74238), (55, 74139), (56, 74118),

Gene: Loadrie_143 Start: 75624, Stop: 75241, Start Num: 33

Candidate Starts for Loadrie_143:

(Start: 33 @75624 has 7 MA's), (35, 75603), (40, 75561), (41, 75525), (42, 75507), (43, 75498), (44, 75492), (46, 75447), (47, 75429), (49, 75411), (55, 75312), (56, 75291),

Gene: Miley16_143 Start: 75785, Stop: 75342, Start Num: 26

Candidate Starts for Miley16_143:

(Start: 26 @75785 has 15 MA's), (30, 75764), (41, 75626), (42, 75608), (43, 75599), (44, 75593), (46, 75548), (47, 75530), (49, 75512), (55, 75413), (56, 75392),

Gene: MkaliMitinis3_143 Start: 75001, Stop: 74618, Start Num: 33

Candidate Starts for MkaliMitinis3_143:

(Start: 33 @75001 has 7 MA's), (40, 74938), (41, 74902), (42, 74884), (43, 74875), (44, 74869), (46, 74824), (47, 74806), (49, 74788), (55, 74689), (56, 74668),

Gene: Netyap_142 Start: 75498, Stop: 75055, Start Num: 26

Candidate Starts for Netyap_142:

(Start: 26 @75498 has 15 MA's), (30, 75477), (41, 75339), (42, 75321), (43, 75312), (44, 75306), (46, 75261), (47, 75243), (49, 75225), (55, 75126), (56, 75105),

Gene: Nicholasp3_142 Start: 74948, Stop: 74472, Start Num: 17

Candidate Starts for Nicholasp3_142:

(Start: 9 @74981 has 4 MA's), (Start: 17 @74948 has 1 MA's), (31, 74864), (34, 74849), (41, 74756), (42, 74738), (43, 74729), (44, 74723), (46, 74678), (47, 74660), (49, 74642), (55, 74543), (56, 74522),

Gene: PYPDinur_154 Start: 76886, Stop: 76455, Start Num: 32

Candidate Starts for PYPDinur_154:

(Start: 32 @76886 has 3 MA's), (41, 76745), (43, 76718), (46, 76667), (49, 76631), (51, 76577), (54, 76532), (56, 76505),

Gene: Quby_155 Start: 76706, Stop: 76317, Start Num: 32

Candidate Starts for Quby_155:

(Start: 32 @76706 has 3 MA's), (41, 76607), (43, 76580), (46, 76529), (49, 76493), (51, 76439), (54, 76394), (56, 76367),

Gene: Rossetti_144 Start: 75764, Stop: 75381, Start Num: 33

Candidate Starts for Rossetti_144:

(29, 75800), (Start: 33 @75764 has 7 MA's), (35, 75743), (40, 75701), (41, 75665), (42, 75647), (43, 75638), (44, 75632), (46, 75587), (47, 75569), (49, 75551), (55, 75452), (56, 75431),

Gene: Rumpelstiltskin_111 Start: 68448, Stop: 68065, Start Num: 33

Candidate Starts for Rumpelstiltskin_111:

(20, 68529), (23, 68520), (27, 68493), (Start: 33 @68448 has 7 MA's), (35, 68427), (40, 68385), (41, 68349), (42, 68331), (43, 68322), (46, 68271), (47, 68253), (49, 68235), (55, 68136), (56, 68115),

Gene: Sarshaun_134 Start: 72297, Stop: 71854, Start Num: 26

Candidate Starts for Sarshaun_134:

(Start: 26 @72297 has 15 MA's), (30, 72276), (41, 72138), (42, 72120), (43, 72111), (44, 72105), (46, 72060), (47, 72042), (49, 72024), (55, 71925), (56, 71904),

Gene: Sheng711_154 Start: 76211, Stop: 75822, Start Num: 32

Candidate Starts for Sheng711_154:

(Start: 32 @76211 has 3 MA's), (41, 76112), (43, 76085), (46, 76034), (49, 75998), (51, 75944), (54, 75899), (56, 75872),

Gene: SoJulia_147 Start: 77202, Stop: 76759, Start Num: 26

Candidate Starts for SoJulia_147:

(8, 77283), (11, 77274), (15, 77247), (Start: 26 @77202 has 15 MA's), (30, 77181), (36, 77118), (41, 77043), (42, 77025), (43, 77016), (44, 77010), (46, 76965), (47, 76947), (49, 76929), (55, 76830),

Gene: Soap141_142 Start: 76003, Stop: 75560, Start Num: 26

Candidate Starts for Soap141_142:

(Start: 26 @76003 has 15 MA's), (30, 75982), (41, 75844), (42, 75826), (43, 75817), (44, 75811), (46, 75766), (47, 75748), (49, 75730), (55, 75631), (56, 75610),

Gene: Tourach_143 Start: 77029, Stop: 76652, Start Num: 33

Candidate Starts for Tourach_143:

(29, 77068), (Start: 33 @77029 has 7 MA's), (37, 76999), (40, 76966), (43, 76909), (44, 76903), (46, 76858), (47, 76840), (49, 76822), (55, 76723), (56, 76702),

Gene: Underpass_131 Start: 70212, Stop: 69703, Start Num: 9

Candidate Starts for Underpass_131:

(Start: 9 @70212 has 4 MA's), (Start: 17 @70179 has 1 MA's), (31, 70095), (34, 70080), (41, 69987), (42, 69969), (43, 69960), (44, 69954), (46, 69909), (47, 69891), (49, 69873), (55, 69774), (56, 69753),

Gene: Vetrix_140 Start: 75660, Stop: 75277, Start Num: 33

Candidate Starts for Vetrix_140:

(Start: 33 @75660 has 7 MA's), (40, 75597), (41, 75561), (42, 75543), (43, 75534), (44, 75528), (46, 75483), (47, 75465), (49, 75447), (55, 75348), (56, 75327),

Gene: Wigglewiggles_144 Start: 75586, Stop: 75203, Start Num: 33

Candidate Starts for Wigglewiggles_144:

(Start: 33 @75586 has 7 MA's), (40, 75523), (41, 75487), (42, 75469), (43, 75460), (44, 75454), (46, 75409), (47, 75391), (49, 75373), (55, 75274), (56, 75253),

Gene: Wilder_143 Start: 74939, Stop: 74430, Start Num: 9

Candidate Starts for Wilder_143:

(Start: 9 @74939 has 4 MA's), (Start: 17 @74906 has 1 MA's), (31, 74822), (34, 74807), (41, 74714), (42, 74696), (43, 74687), (44, 74681), (46, 74636), (47, 74618), (49, 74600), (56, 74480),

Gene: Winky_143 Start: 75785, Stop: 75342, Start Num: 26

Candidate Starts for Winky_143:

(Start: 26 @75785 has 15 MA's), (30, 75764), (41, 75626), (42, 75608), (43, 75599), (44, 75593), (46, 75548), (47, 75530), (49, 75512), (55, 75413), (56, 75392),

Gene: Zakai_145 Start: 75495, Stop: 75052, Start Num: 26

Candidate Starts for Zakai_145:

(Start: 26 @75495 has 15 MA's), (30, 75474), (41, 75336), (42, 75318), (43, 75309), (44, 75303), (46, 75258), (47, 75240), (49, 75222), (55, 75123), (56, 75102),

Gene: ZhongYanYuan_140 Start: 75351, Stop: 74974, Start Num: 33

Candidate Starts for ZhongYanYuan_140:

(6, 75519), (7, 75510), (12, 75471), (13, 75456), (18, 75450), (25, 75411), (29, 75390), (Start: 33 @75351 has 7 MA's), (40, 75288), (43, 75231), (46, 75180), (48, 75159), (49, 75144), (55, 75045),