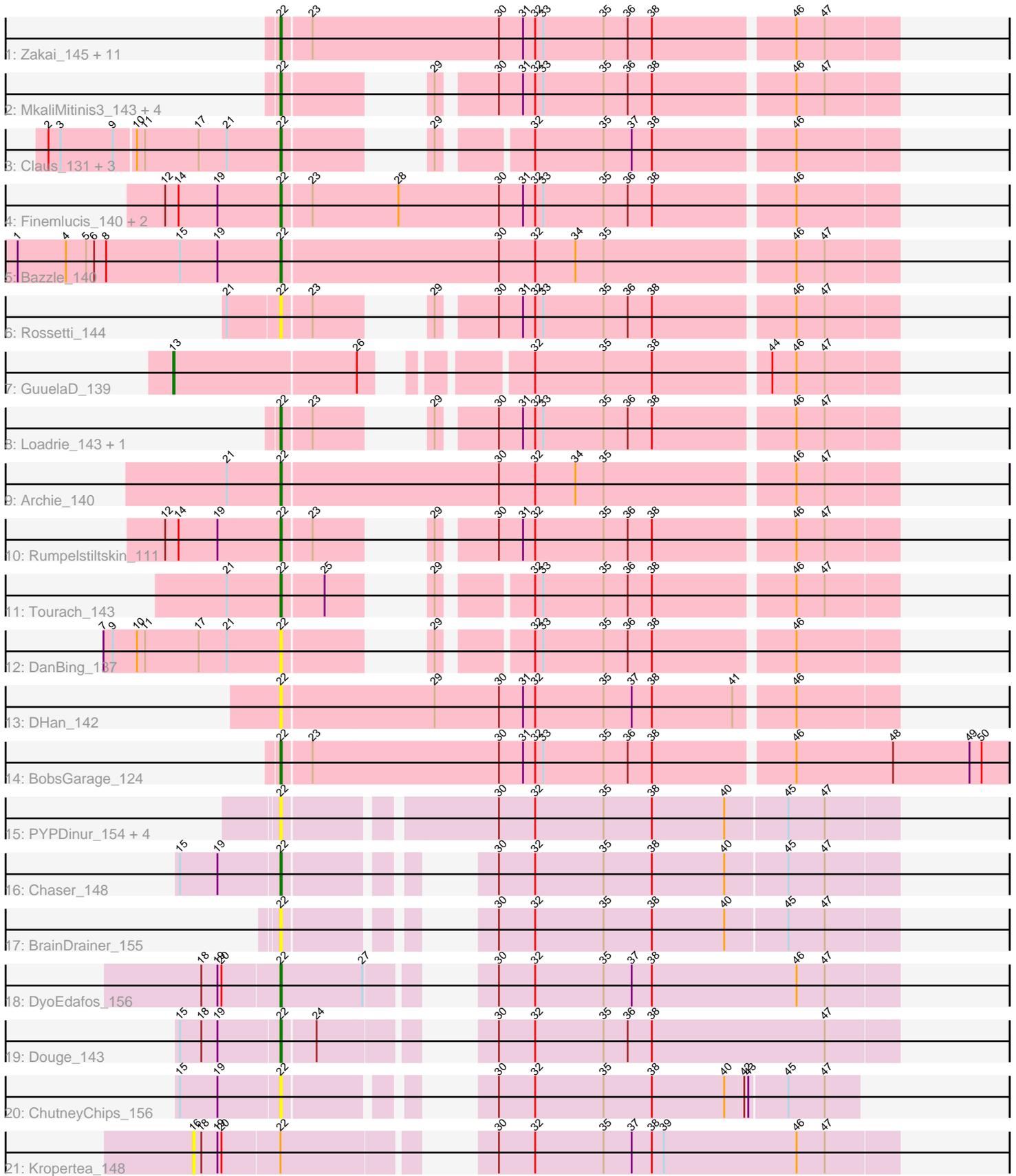# Pham 283925

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 283925 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283925 has 46 members, 19 are drafts.

Phages represented in each track:
• Track 1 : Zakai_145, Netyap_142, Lewan_143, Sarshaun_134, Soap141_142, Breezona_143, DrSeegs_140, BigCheese_138, Miley16_143, Itos_144, Faith1_140, Winky_143
• Track 2 : MkaliMitinis3_143, Crossroads_144, Wigglewiggle_144, Vetrix_140, Lynnae_142
• Track 3 : Claus_131, ZhongYanYuan_140, Baoshan_128, Hafay_110
• Track 4 : Finemlucis_140, SoJulia_147, Gabriela_142
• Track 5 : Bazzle_140
• Track 6 : Rossetti_144
• Track 7 : GuuelaD_139
• Track 8 : Loadrie_143, OverPar_126
• Track 9 : Archie_140
• Track 10 : Rumpelstiltskin_111
• Track 11 : Tourach_143
• Track 12 : DanBing_137
• Track 13 : DHan_142
• Track 14 : BobsGarage_124
• Track 15 : PYPDinur_154, Quby_155, Douzhi_155, Sheng711_154, FarmResident_154
• Track 16 : Chaser_148
• Track 17 : BrainDrainer_155
• Track 18 : DyoEdafos_156
• Track 19 : Douge_143
• Track 20 : ChutneyChips_156
• Track 21 : Kropertea_148

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 26 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Archie_140, Baoshan_128, Bazzle_140, BigCheese_138, BobsGarage_124, BrainDrainer_155, Breezona_143, Chaser_148, ChutneyChips_156, Claus_131,

Crossroads_144, DHan_142, DanBing_137, Douge_143, Douzhi_155, DrSeegs_140, DyoEdafos_156, Faith1_140, FarmResident_154, Finemlucis_140, Gabriela_142, Hafay_110, Itos_144, Lewan_143, Loadrie_143, Lynnae_142, Miley16_143, MkaliMitinis3_143, Netyap_142, OverPar_126, PYPDinur_154, Quby_155, Rossetti_144, Rumpelstiltskin_111, Sarshaun_134, Sheng711_154, SoJulia_147, Soap141_142, Tourach_143, Vetrix_140, Wigglewiggle_144, Winky_143, Zakai_145, ZhongYanYuan_140,

Genes that have the "Most Annotated" start but do not call it:
• Kropertea_148,

Genes that do not have the "Most Annotated" start:
• GuuelaD_139,

Summary by start number:

Start 13:
• Found in 1 of 46 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GuuelaD_139 (L2),

Start 16:
• Found in 1 of 46 (2.2%) 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 22:
• Found in 45 of 46 (97.8%) of genes in pham
• Manual Annotations of this start: 26 of 27
• Called 97.8% of time when present
• Phage (with cluster) where this start called: Archie_140 (L2), Baoshan_128 (L2), Bazzle_140 (L2), BigCheese_138 (L2), BobsGarage_124 (L2), BrainDrainer_155 (L4), Breezona_143 (L2), Chaser_148 (L4), ChutneyChips_156 (L4), Claus_131 (L2), Crossroads_144 (L2), DHan_142 (L2), DanBing_137 (L2), Douge_143 (L4), Douzhi_155 (L4), DrSeegs_140 (L2), DyoEdafos_156 (L4), Faith1_140 (L2), FarmResident_154 (L4), Finemlucis_140 (L2), Gabriela_142 (L2), Hafay_110 (L2), Itos_144 (L2), Lewan_143 (L2), Loadrie_143 (L2), Lynnae_142 (L2), Miley16_143 (L2), MkaliMitinis3_143 (L2), Netyap_142 (L2), OverPar_126 (L2), PYPDinur_154 (L4), Quby_155 (L4), Rossetti_144 (L2), Rumpelstiltskin_111 (L2), Sarshaun_134 (L2), Sheng711_154 (L4), SoJulia_147 (L2), Soap141_142 (L2), Tourach_143 (L2), Vetrix_140 (L2), Wigglewiggle_144 (L2), Winky_143 (L2), Zakai_145 (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 13 was manually annotated 1 time for cluster L2.
•Start number 22 was manually annotated 23 times for cluster L2.

Info for manual annotations of cluster L4:
•Start number 22 was manually annotated 3 times for cluster L4.

Gene Information:

Gene: Archie_140 Start: 75399, Stop: 74956, Start Num: 22
Candidate Starts for Archie_140:
(21, 75438), (Start: 22 @75399 has 26 MA's), (30, 75240), (32, 75213), (34, 75183), (35, 75162), (46, 75027), (47, 75006),

Gene: Baoshan_128 Start: 70471, Stop: 70094, Start Num: 22
Candidate Starts for Baoshan_128:
(2, 70639), (3, 70630), (9, 70591), (10, 70576), (11, 70570), (17, 70531), (21, 70510), (Start: 22 @70471 has 26 MA's), (29, 70408), (32, 70351), (35, 70300), (37, 70279), (38, 70264), (46, 70165),

Gene: Bazzle_140 Start: 75896, Stop: 75453, Start Num: 22
Candidate Starts for Bazzle_140:
(1, 76088), (4, 76052), (5, 76037), (6, 76031), (8, 76022), (15, 75968), (19, 75941), (Start: 22 @75896 has 26 MA's), (30, 75737), (32, 75710), (34, 75680), (35, 75659), (46, 75524), (47, 75503),

Gene: BigCheese_138 Start: 71942, Stop: 71499, Start Num: 22
Candidate Starts for BigCheese_138:
(Start: 22 @71942 has 26 MA's), (23, 71921), (30, 71783), (31, 71765), (32, 71756), (33, 71750), (35, 71705), (36, 71687), (38, 71669), (46, 71570), (47, 71549),

Gene: BobsGarage_124 Start: 67234, Stop: 66704, Start Num: 22
Candidate Starts for BobsGarage_124:
(Start: 22 @67234 has 26 MA's), (23, 67213), (30, 67075), (31, 67057), (32, 67048), (33, 67042), (35, 66997), (36, 66979), (38, 66961), (46, 66862), (48, 66790), (49, 66733), (50, 66724),

Gene: BrainDrainer_155 Start: 76837, Stop: 76448, Start Num: 22
Candidate Starts for BrainDrainer_155:
(Start: 22 @76837 has 26 MA's), (30, 76738), (32, 76711), (35, 76660), (38, 76624), (40, 76570), (45, 76525), (47, 76498),

Gene: Breezona_143 Start: 75784, Stop: 75341, Start Num: 22
Candidate Starts for Breezona_143:
(Start: 22 @75784 has 26 MA's), (23, 75763), (30, 75625), (31, 75607), (32, 75598), (33, 75592), (35, 75547), (36, 75529), (38, 75511), (46, 75412), (47, 75391),

Gene: Chaser_148 Start: 75823, Stop: 75434, Start Num: 22
Candidate Starts for Chaser_148:
(15, 75895), (19, 75868), (Start: 22 @75823 has 26 MA's), (30, 75724), (32, 75697), (35, 75646), (38, 75610), (40, 75556), (45, 75511), (47, 75484),

Gene: ChutneyChips_156 Start: 76947, Stop: 76585, Start Num: 22
Candidate Starts for ChutneyChips_156:
(15, 77019), (19, 76992), (Start: 22 @76947 has 26 MA's), (30, 76848), (32, 76821), (35, 76770), (38, 76734), (40, 76680), (42, 76665), (43, 76662), (45, 76635), (47, 76608),

Gene: Claus_131 Start: 71384, Stop: 71007, Start Num: 22

Candidate Starts for Claus_131:
(2, 71552), (3, 71543), (9, 71504), (10, 71489), (11, 71483), (17, 71444), (21, 71423), (Start: 22 @71384 has 26 MA's), (29, 71321), (32, 71264), (35, 71213), (37, 71192), (38, 71177), (46, 71078),

Gene: Crossroads_144 Start: 75286, Stop: 74903, Start Num: 22
Candidate Starts for Crossroads_144:
(Start: 22 @75286 has 26 MA's), (29, 75223), (30, 75187), (31, 75169), (32, 75160), (33, 75154), (35, 75109), (36, 75091), (38, 75073), (46, 74974), (47, 74953),

Gene: DHan_142 Start: 75640, Stop: 75197, Start Num: 22
Candidate Starts for DHan_142:
(Start: 22 @75640 has 26 MA's), (29, 75529), (30, 75481), (31, 75463), (32, 75454), (35, 75403), (37, 75382), (38, 75367), (41, 75307), (46, 75268),

Gene: DanBing_137 Start: 71647, Stop: 71270, Start Num: 22
Candidate Starts for DanBing_137:
(7, 71776), (9, 71770), (10, 71752), (11, 71746), (17, 71707), (21, 71686), (Start: 22 @71647 has 26 MA's), (29, 71584), (32, 71527), (33, 71521), (35, 71476), (36, 71458), (38, 71440), (46, 71341),

Gene: Douge_143 Start: 73698, Stop: 73297, Start Num: 22
Candidate Starts for Douge_143:
(15, 73770), (18, 73755), (19, 73743), (Start: 22 @73698 has 26 MA's), (24, 73674), (30, 73590), (32, 73563), (35, 73512), (36, 73494), (38, 73476), (47, 73347),

Gene: Douzhi_155 Start: 77003, Stop: 76614, Start Num: 22
Candidate Starts for Douzhi_155:
(Start: 22 @77003 has 26 MA's), (30, 76904), (32, 76877), (35, 76826), (38, 76790), (40, 76736), (45, 76691), (47, 76664),

Gene: DrSeegs_140 Start: 75784, Stop: 75341, Start Num: 22
Candidate Starts for DrSeegs_140:
(Start: 22 @75784 has 26 MA's), (23, 75763), (30, 75625), (31, 75607), (32, 75598), (33, 75592), (35, 75547), (36, 75529), (38, 75511), (46, 75412), (47, 75391),

Gene: DyoEdafos_156 Start: 76685, Stop: 76281, Start Num: 22
Candidate Starts for DyoEdafos_156:
(18, 76739), (19, 76727), (20, 76724), (Start: 22 @76685 has 26 MA's), (27, 76625), (30, 76574), (32, 76547), (35, 76496), (37, 76475), (38, 76460), (46, 76352), (47, 76331),

Gene: Faith1_140 Start: 75092, Stop: 74649, Start Num: 22
Candidate Starts for Faith1_140:
(Start: 22 @75092 has 26 MA's), (23, 75071), (30, 74933), (31, 74915), (32, 74906), (33, 74900), (35, 74855), (36, 74837), (38, 74819), (46, 74720), (47, 74699),

Gene: FarmResident_154 Start: 76652, Stop: 76263, Start Num: 22
Candidate Starts for FarmResident_154:
(Start: 22 @76652 has 26 MA's), (30, 76553), (32, 76526), (35, 76475), (38, 76439), (40, 76385), (45, 76340), (47, 76313),

Gene: Finemlucis_140 Start: 76184, Stop: 75741, Start Num: 22
Candidate Starts for Finemlucis_140:
(12, 76265), (14, 76256), (19, 76229), (Start: 22 @76184 has 26 MA's), (23, 76163), (28, 76100), (30, 76025), (31, 76007), (32, 75998), (33, 75992), (35, 75947), (36, 75929), (38, 75911), (46, 75812),

Gene: Gabriela_142 Start: 74527, Stop: 74084, Start Num: 22
Candidate Starts for Gabriela_142:
(12, 74608), (14, 74599), (19, 74572), (Start: 22 @74527 has 26 MA's), (23, 74506), (28, 74443), (30, 74368), (31, 74350), (32, 74341), (33, 74335), (35, 74290), (36, 74272), (38, 74254), (46, 74155),

Gene: GuuelaD_139 Start: 75467, Stop: 74988, Start Num: 13
Candidate Starts for GuuelaD_139:
(Start: 13 @75467 has 1 MA's), (26, 75335), (32, 75245), (35, 75194), (38, 75158), (44, 75077), (46, 75059), (47, 75038),

Gene: Hafay_110 Start: 67215, Stop: 66838, Start Num: 22
Candidate Starts for Hafay_110:
(2, 67383), (3, 67374), (9, 67335), (10, 67320), (11, 67314), (17, 67275), (21, 67254), (Start: 22 @67215 has 26 MA's), (29, 67152), (32, 67095), (35, 67044), (37, 67023), (38, 67008), (46, 66909),

Gene: Itos_144 Start: 74069, Stop: 73626, Start Num: 22
Candidate Starts for Itos_144:
(Start: 22 @74069 has 26 MA's), (23, 74048), (30, 73910), (31, 73892), (32, 73883), (33, 73877), (35, 73832), (36, 73814), (38, 73796), (46, 73697), (47, 73676),

Gene: Kropertea_148 Start: 76165, Stop: 75701, Start Num: 16
Candidate Starts for Kropertea_148:
(16, 76165), (18, 76159), (19, 76147), (20, 76144), (Start: 22 @76105 has 26 MA's), (30, 75994), (32, 75967), (35, 75916), (37, 75895), (38, 75880), (39, 75871), (46, 75772), (47, 75751),

Gene: Lewan_143 Start: 75891, Stop: 75448, Start Num: 22
Candidate Starts for Lewan_143:
(Start: 22 @75891 has 26 MA's), (23, 75870), (30, 75732), (31, 75714), (32, 75705), (33, 75699), (35, 75654), (36, 75636), (38, 75618), (46, 75519), (47, 75498),

Gene: Loadrie_143 Start: 75624, Stop: 75241, Start Num: 22
Candidate Starts for Loadrie_143:
(Start: 22 @75624 has 26 MA's), (23, 75603), (29, 75561), (30, 75525), (31, 75507), (32, 75498), (33, 75492), (35, 75447), (36, 75429), (38, 75411), (46, 75312), (47, 75291),

Gene: Lynnae_142 Start: 74761, Stop: 74378, Start Num: 22
Candidate Starts for Lynnae_142:
(Start: 22 @74761 has 26 MA's), (29, 74698), (30, 74662), (31, 74644), (32, 74635), (33, 74629), (35, 74584), (36, 74566), (38, 74548), (46, 74449), (47, 74428),

Gene: Miley16_143 Start: 75785, Stop: 75342, Start Num: 22
Candidate Starts for Miley16_143:
(Start: 22 @75785 has 26 MA's), (23, 75764), (30, 75626), (31, 75608), (32, 75599), (33, 75593), (35, 75548), (36, 75530), (38, 75512), (46, 75413), (47, 75392),

Gene: MkaliMitinis3_143 Start: 75001, Stop: 74618, Start Num: 22
Candidate Starts for MkaliMitinis3_143:
(Start: 22 @75001 has 26 MA's), (29, 74938), (30, 74902), (31, 74884), (32, 74875), (33, 74869), (35, 74824), (36, 74806), (38, 74788), (46, 74689), (47, 74668),

Gene: Netyap_142 Start: 75498, Stop: 75055, Start Num: 22
Candidate Starts for Netyap_142:

(Start: 22 @75498 has 26 MA's), (23, 75477), (30, 75339), (31, 75321), (32, 75312), (33, 75306), (35, 75261), (36, 75243), (38, 75225), (46, 75126), (47, 75105),

Gene: OverPar_126 Start: 69125, Stop: 68742, Start Num: 22
Candidate Starts for OverPar_126:
(Start: 22 @69125 has 26 MA's), (23, 69104), (29, 69062), (30, 69026), (31, 69008), (32, 68999), (33, 68993), (35, 68948), (36, 68930), (38, 68912), (46, 68813), (47, 68792),

Gene: PYPDinur_154 Start: 76886, Stop: 76455, Start Num: 22
Candidate Starts for PYPDinur_154:
(Start: 22 @76886 has 26 MA's), (30, 76745), (32, 76718), (35, 76667), (38, 76631), (40, 76577), (45, 76532), (47, 76505),

Gene: Quby_155 Start: 76706, Stop: 76317, Start Num: 22
Candidate Starts for Quby_155:
(Start: 22 @76706 has 26 MA's), (30, 76607), (32, 76580), (35, 76529), (38, 76493), (40, 76439), (45, 76394), (47, 76367),

Gene: Rossetti_144 Start: 75764, Stop: 75381, Start Num: 22
Candidate Starts for Rossetti_144:
(21, 75800), (Start: 22 @75764 has 26 MA's), (23, 75743), (29, 75701), (30, 75665), (31, 75647), (32, 75638), (33, 75632), (35, 75587), (36, 75569), (38, 75551), (46, 75452), (47, 75431),

Gene: Rumpelstiltskin_111 Start: 68448, Stop: 68065, Start Num: 22
Candidate Starts for Rumpelstiltskin_111:
(12, 68529), (14, 68520), (19, 68493), (Start: 22 @68448 has 26 MA's), (23, 68427), (29, 68385), (30, 68349), (31, 68331), (32, 68322), (35, 68271), (36, 68253), (38, 68235), (46, 68136), (47, 68115),

Gene: Sarshaun_134 Start: 72297, Stop: 71854, Start Num: 22
Candidate Starts for Sarshaun_134:
(Start: 22 @72297 has 26 MA's), (23, 72276), (30, 72138), (31, 72120), (32, 72111), (33, 72105), (35, 72060), (36, 72042), (38, 72024), (46, 71925), (47, 71904),

Gene: Sheng711_154 Start: 76211, Stop: 75822, Start Num: 22
Candidate Starts for Sheng711_154:
(Start: 22 @76211 has 26 MA's), (30, 76112), (32, 76085), (35, 76034), (38, 75998), (40, 75944), (45, 75899), (47, 75872),

Gene: SoJulia_147 Start: 77202, Stop: 76759, Start Num: 22
Candidate Starts for SoJulia_147:
(12, 77283), (14, 77274), (19, 77247), (Start: 22 @77202 has 26 MA's), (23, 77181), (28, 77118), (30, 77043), (31, 77025), (32, 77016), (33, 77010), (35, 76965), (36, 76947), (38, 76929), (46, 76830),

Gene: Soap141_142 Start: 76003, Stop: 75560, Start Num: 22
Candidate Starts for Soap141_142:
(Start: 22 @76003 has 26 MA's), (23, 75982), (30, 75844), (31, 75826), (32, 75817), (33, 75811), (35, 75766), (36, 75748), (38, 75730), (46, 75631), (47, 75610),

Gene: Tourach_143 Start: 77029, Stop: 76652, Start Num: 22
Candidate Starts for Tourach_143:
(21, 77068), (Start: 22 @77029 has 26 MA's), (25, 76999), (29, 76966), (32, 76909), (33, 76903), (35, 76858), (36, 76840), (38, 76822), (46, 76723), (47, 76702),

Gene: Vetrix_140 Start: 75660, Stop: 75277, Start Num: 22
Candidate Starts for Vetrix_140:
(Start: 22 @75660 has 26 MA's), (29, 75597), (30, 75561), (31, 75543), (32, 75534), (33, 75528), (35, 75483), (36, 75465), (38, 75447), (46, 75348), (47, 75327),

Gene: Wigglewiggle_144 Start: 75586, Stop: 75203, Start Num: 22
Candidate Starts for Wigglewiggle_144:
(Start: 22 @75586 has 26 MA's), (29, 75523), (30, 75487), (31, 75469), (32, 75460), (33, 75454), (35, 75409), (36, 75391), (38, 75373), (46, 75274), (47, 75253),

Gene: Winky_143 Start: 75785, Stop: 75342, Start Num: 22
Candidate Starts for Winky_143:
(Start: 22 @75785 has 26 MA's), (23, 75764), (30, 75626), (31, 75608), (32, 75599), (33, 75593), (35, 75548), (36, 75530), (38, 75512), (46, 75413), (47, 75392),

Gene: Zakai_145 Start: 75495, Stop: 75052, Start Num: 22
Candidate Starts for Zakai_145:
(Start: 22 @75495 has 26 MA's), (23, 75474), (30, 75336), (31, 75318), (32, 75309), (33, 75303), (35, 75258), (36, 75240), (38, 75222), (46, 75123), (47, 75102),

Gene: ZhongYanYuan_140 Start: 75351, Stop: 74974, Start Num: 22
Candidate Starts for ZhongYanYuan_140:
(2, 75519), (3, 75510), (9, 75471), (10, 75456), (11, 75450), (17, 75411), (21, 75390), (Start: 22 @75351 has 26 MA's), (29, 75288), (32, 75231), (35, 75180), (37, 75159), (38, 75144), (46, 75045),