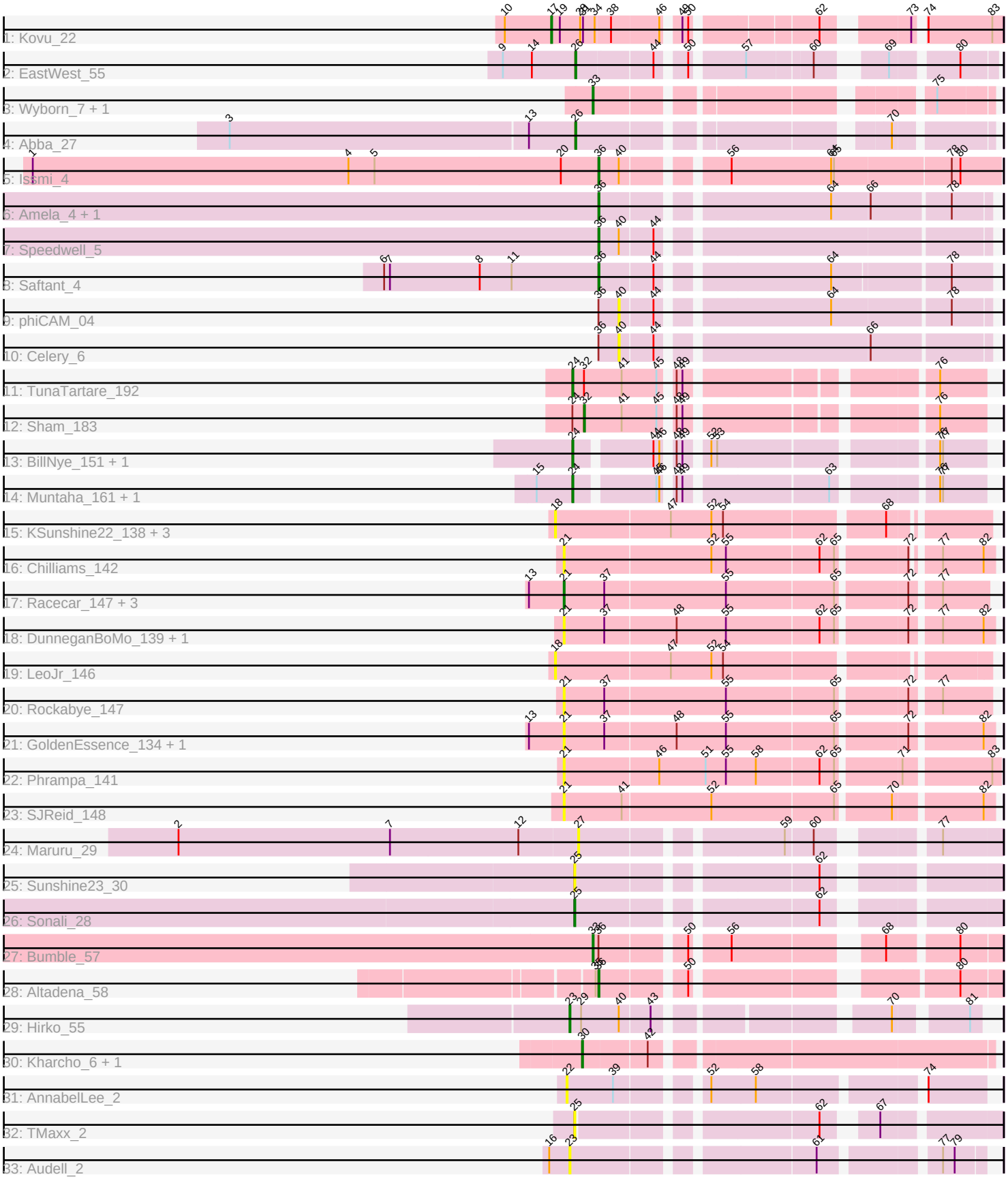
Pham 198188


1: Kovu_22
2: EastWest_55
3: Wyborn_7 + 1
4: Abba_27
5: Issmi_4
6: Amela_4 + 1
7: Speedwell_5
8: Saftant_4
9: phiCAM_04
10: Celery_6
11: TunaTartare_192
12: Sham_183
13: BillNye_151 + 1
14: Muntaha_161 + 1
15: KSunshine22_138 + 3
16: Chilliams_142
17: Racecar_147 + 3
18: DunneganBoMo_139 + 1
19: LeoJr_146
20: Rockabye_147
21: GoldenEssence_134 + 1
22: Phrampa_141
23: SJReid_148
24: Maruru_29
25: Sunshine23_30
26: Sonali_28
27: Bumble_57
28: Altadena_58
29: Hirko_55
30: Kharcho_6 + 1
31: AnnabelLee_2
32: TMaxx_2
33: Audell_2

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 198188 Report

This analysis was run 01/18/25 on database version 583.

Pham number 198188 has 46 members, 22 are drafts.

Phages represented in each track:
- Track 1 : Kovu_22
- Track 2 : EastWest_55
- Track 3 : Wyborn_7, Sicarius2_7
- Track 4 : Abba_27
- Track 5 : Issmi_4
- Track 6 : Amela_4, Verse_4
- Track 7 : Speedwell_5
- Track 8 : Saftant_4
- Track 9 : phiCAM_04
- Track 10 : Celery_6
- Track 11 : TunaTartare_192
- Track 12 : Sham_183
- Track 13 : BillNye_151, Circinus_152
- Track 14 : Muntaha_161, Wakanda_159
- Track 15 : KSunshine22_138, Atuin_141, ReginaGlobina_145, Ellewin_137
- Track 16 : Chilliams_142
- Track 17 : Racecar_147, Talia1610_148, Mimi_152, Bloom_150
- Track 18 : DunneganBoMo_139, WaddleDee_139
- Track 19 : LeoJr_146
- Track 20 : Rockabye_147
- Track 21 : GoldenEssence_134, Patbob_145
- Track 22 : Phrampa_141
- Track 23 : SJReid_148
- Track 24 : Maruru_29
- Track 25 : Sunshine23_30
- Track 26 : Sonali_28
- Track 27 : Bumble_57
- Track 28 : Altadena_58
- Track 29 : Hirko_55
- Track 30 : Kharcho_6, Ottawa_6
- Track 31 : AnnabelLee_2
- Track 32 : TMaxx_2
- Track 33 : Audell_2

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

The start number called the most often in the published annotations is 36, it was called in 6 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Altadena_58, Amela_4, Issmi_4, Saftant_4, Speedwell_5, Verse_4,

Genes that have the "Most Annotated" start but do not call it:
• Bumble_57, Celery_6, phiCAM_04,

Genes that do not have the "Most Annotated" start:
• Abba_27, AnnabelLee_2, Atuin_141, Audell_2, BillNye_151, Bloom_150, Chilliams_142, Circinus_152, DunneganBoMo_139, EastWest_55, Ellewin_137, GoldenEssence_134, Hirko_55, KSunshine22_138, Kharcho_6, Kovu_22, LeoJr_146, Maruru_29, Mimi_152, Muntaha_161, Ottawa_6, Patbob_145, Phrampa_141, Racecar_147, ReginaGlobina_145, Rockabye_147, SJReid_148, Sham_183, Sicarius2_7, Sonali_28, Sunshine23_30, TMaxx_2, Talia1610_148, TunaTartare_192, WaddleDee_139, Wakanda_159, Wyborn_7,

Summary by start number:

Start 17:
• Found in 1 of 46 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kovu_22 (AL),

Start 18:
• Found in 5 of 46 (10.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atuin_141 (FC), Ellewin_137 (FC), KSunshine22_138 (FC), LeoJr_146 (FC), ReginaGlobina_145 (FC),

Start 21:
• Found in 12 of 46 (26.1%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bloom_150 (FC), Chilliams_142 (FC), DunneganBoMo_139 (FC), GoldenEssence_134 (FC), Mimi_152 (FC), Patbob_145 (FC), Phrampa_141 (FC), Racecar_147 (FC), Rockabye_147 (FC), SJReid_148 (FC), Talia1610_148 (FC), WaddleDee_139 (FC),

Start 22:
• 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: AnnabelLee_2 (FR),

Start 23:
• Found in 2 of 46 (4.3%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Audell_2 (FR), Hirko_55 (FL),

Start 24:
• Found in 6 of 46 (13.0%) of genes in pham
• Manual Annotations of this start: 5 of 24
• Called 83.3% of time when present
• Phage (with cluster) where this start called: BillNye_151 (BK2), Circinus_152 (BK2), Muntaha_161 (BK2), TunaTartare_192 (BK1), Wakanda_159 (BK2),

Start 25:
• Found in 3 of 46 (6.5%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sonali_28 (FG), Sunshine23_30 (FG), TMaxx_2 (FR),

Start 26:
• Found in 2 of 46 (4.3%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abba_27 (AO3), EastWest_55 (AO),

Start 27:
• 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: Maruru_29 (FG),

Start 30:
• Found in 2 of 46 (4.3%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kharcho_6 (FM), Ottawa_6 (FM),

Start 32:
• Found in 2 of 46 (4.3%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Sham_183 (BK1),

Start 33:
• Found in 3 of 46 (6.5%) of genes in pham
• Manual Annotations of this start: 3 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bumble_57 (FH), Sicarius2_7 (AO2), Wyborn_7 (AO2),

Start 36:
• Found in 9 of 46 (19.6%) of genes in pham
• Manual Annotations of this start: 6 of 24
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Altadena_58 (FH), Amela_4 (BD3), Issmi_4 (BD2), Saftant_4 (BD3), Speedwell_5 (BD3), Verse_4 (BD3),

Start 40:
• Found in 5 of 46 (10.9%) of genes in pham
• No Manual Annotations of this start.
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Celery_6 (BD3), phiCAM_04 (BD3),

Summary by clusters:

There are 14 clusters represented in this pham: FR, BD3, BD2, AL, AO, FC, AO3, BK1, BK2, FG, FH, FL, FM, AO2,

Info for manual annotations of cluster AL:
•Start number 17 was manually annotated 1 time for cluster AL.

Info for manual annotations of cluster AO:
•Start number 26 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO2:
•Start number 33 was manually annotated 2 times for cluster AO2.

Info for manual annotations of cluster AO3:
•Start number 26 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster BD2:
•Start number 36 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:
•Start number 36 was manually annotated 4 times for cluster BD3.

Info for manual annotations of cluster BK1:
•Start number 24 was manually annotated 1 time for cluster BK1.
•Start number 32 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 24 was manually annotated 4 times for cluster BK2.

Info for manual annotations of cluster FC:
•Start number 21 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster FG:
•Start number 25 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster FH:
•Start number 33 was manually annotated 1 time for cluster FH.
•Start number 36 was manually annotated 1 time for cluster FH.

Info for manual annotations of cluster FL:
•Start number 23 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FM:
•Start number 30 was manually annotated 2 times for cluster FM.

Gene Information:

Gene: Abba_27 Start: 23462, Stop: 23824, Start Num: 26
Candidate Starts for Abba_27:
(3, 23108), (13, 23414), (Start: 26 @23462 has 2 MA's), (70, 23735),

Gene: Altadena_58 Start: 37595, Stop: 37945, Start Num: 36
Candidate Starts for Altadena_58:
(35, 37592), (Start: 36 @37595 has 6 MA's), (50, 37673), (80, 37904),

Gene: Amela_4 Start: 1747, Stop: 2115, Start Num: 36
Candidate Starts for Amela_4:
(Start: 36 @1747 has 6 MA's), (64, 1960), (66, 1999), (78, 2077),

Gene: AnnabelLee_2 Start: 591, Stop: 968, Start Num: 22
Candidate Starts for AnnabelLee_2:
(22, 591), (39, 639), (52, 714), (58, 759), (74, 909),

Gene: Atuin_141 Start: 97930, Stop: 98343, Start Num: 18
Candidate Starts for Atuin_141:
(18, 97930), (47, 98047), (52, 98089), (54, 98101), (68, 98254),

Gene: Audell_2 Start: 519, Stop: 890, Start Num: 23
Candidate Starts for Audell_2:
(16, 498), (Start: 23 @519 has 1 MA's), (61, 744), (77, 849), (79, 861),

Gene: BillNye_151 Start: 88009, Stop: 88371, Start Num: 24
Candidate Starts for BillNye_151:
(Start: 24 @88009 has 5 MA's), (44, 88081), (46, 88087), (48, 88093), (49, 88099), (52, 88117), (53, 88123), (76, 88324), (77, 88327),

Gene: Bloom_150 Start: 99871, Stop: 100284, Start Num: 21
Candidate Starts for Bloom_150:
(13, 99835), (Start: 21 @99871 has 2 MA's), (37, 99913), (55, 100036), (65, 100144), (72, 100210), (77, 100237),

Gene: Bumble_57 Start: 38445, Stop: 38798, Start Num: 33
Candidate Starts for Bumble_57:
(Start: 33 @38445 has 3 MA's), (Start: 36 @38451 has 6 MA's), (50, 38529), (56, 38562), (68, 38691), (80, 38757),

Gene: Celery_6 Start: 1681, Stop: 2028, Start Num: 40
Candidate Starts for Celery_6:
(Start: 36 @1660 has 6 MA's), (40, 1681), (44, 1714), (66, 1912),

Gene: Chilliams_142 Start: 89265, Stop: 89678, Start Num: 21
Candidate Starts for Chilliams_142:
(Start: 21 @89265 has 2 MA's), (52, 89415), (55, 89430), (62, 89523), (65, 89538), (72, 89604), (77, 89625), (82, 89667),

Gene: Circinus_152 Start: 87975, Stop: 88337, Start Num: 24
Candidate Starts for Circinus_152:
(Start: 24 @87975 has 5 MA's), (44, 88047), (46, 88053), (48, 88059), (49, 88065), (52, 88083), (53, 88089), (76, 88290), (77, 88293),

Gene: DunneganBoMo_139 Start: 94525, Stop: 94944, Start Num: 21
Candidate Starts for DunneganBoMo_139:
(Start: 21 @94525 has 2 MA's), (37, 94567), (48, 94639), (55, 94690), (62, 94783), (65, 94798), (72, 94864), (77, 94891), (82, 94933),

Gene: EastWest_55 Start: 37310, Stop: 37666, Start Num: 26
Candidate Starts for EastWest_55:
(9, 37235), (14, 37265), (Start: 26 @37310 has 2 MA's), (44, 37385), (50, 37409), (57, 37457), (60, 37520), (69, 37571), (80, 37631),

Gene: Ellewin_137 Start: 94115, Stop: 94531, Start Num: 18
Candidate Starts for Ellewin_137:
(18, 94115), (47, 94232), (52, 94274), (54, 94286), (68, 94439),

Gene: GoldenEssence_134 Start: 93520, Stop: 93939, Start Num: 21
Candidate Starts for GoldenEssence_134:
(13, 93484), (Start: 21 @93520 has 2 MA's), (37, 93562), (48, 93634), (55, 93685), (65, 93793), (72, 93859), (82, 93928),

Gene: Hirko_55 Start: 40206, Stop: 40562, Start Num: 23
Candidate Starts for Hirko_55:
(Start: 23 @40206 has 1 MA's), (29, 40218), (40, 40257), (43, 40287), (70, 40488), (81, 40551),

Gene: Issmi_4 Start: 1351, Stop: 1734, Start Num: 36
Candidate Starts for Issmi_4:
(1, 766), (4, 1093), (5, 1120), (20, 1312), (Start: 36 @1351 has 6 MA's), (40, 1372), (56, 1462), (64, 1564), (65, 1567), (78, 1684), (80, 1693),

Gene: KSunshine22_138 Start: 95675, Stop: 96091, Start Num: 18
Candidate Starts for KSunshine22_138:
(18, 95675), (47, 95792), (52, 95834), (54, 95846), (68, 95999),

Gene: Kharcho_6 Start: 1919, Stop: 2308, Start Num: 30
Candidate Starts for Kharcho_6:
(Start: 30 @1919 has 2 MA's), (42, 1982),

Gene: Kovu_22 Start: 15481, Stop: 15873, Start Num: 17
Candidate Starts for Kovu_22:
(10, 15433), (Start: 17 @15481 has 1 MA's), (19, 15490), (28, 15511), (31, 15514), (34, 15526), (38, 15541), (46, 15589), (49, 15601), (50, 15607), (62, 15721), (73, 15790), (74, 15796), (83, 15862),

Gene: LeoJr_146 Start: 98531, Stop: 98944, Start Num: 18
Candidate Starts for LeoJr_146:
(18, 98531), (47, 98648), (52, 98690), (54, 98702),

Gene: Maruru_29 Start: 27682, Stop: 28050, Start Num: 27
Candidate Starts for Maruru_29:
(2, 27271), (7, 27490), (12, 27622), (27, 27682), (59, 27868), (60, 27895), (77, 27991),

Gene: Mimi_152 Start: 98936, Stop: 99349, Start Num: 21
Candidate Starts for Mimi_152:
(13, 98900), (Start: 21 @98936 has 2 MA's), (37, 98978), (55, 99101), (65, 99209), (72, 99275), (77, 99302),

Gene: Muntaha_161 Start: 87293, Stop: 87655, Start Num: 24
Candidate Starts for Muntaha_161:
(15, 87257), (Start: 24 @87293 has 5 MA's), (45, 87368), (46, 87371), (48, 87377), (49, 87383), (63, 87518), (76, 87608), (77, 87611),

Gene: Ottawa_6 Start: 1919, Stop: 2308, Start Num: 30
Candidate Starts for Ottawa_6:
(Start: 30 @1919 has 2 MA's), (42, 1982),

Gene: Patbob_145 Start: 99649, Stop: 100068, Start Num: 21
Candidate Starts for Patbob_145:
(13, 99613), (Start: 21 @99649 has 2 MA's), (37, 99691), (48, 99763), (55, 99814), (65, 99922), (72, 99988), (82, 100057),

Gene: Phrampa_141 Start: 101294, Stop: 101719, Start Num: 21
Candidate Starts for Phrampa_141:
(Start: 21 @101294 has 2 MA's), (46, 101390), (51, 101438), (55, 101459), (58, 101489), (62, 101552), (65, 101567), (71, 101627), (83, 101711),

Gene: Racecar_147 Start: 99924, Stop: 100337, Start Num: 21
Candidate Starts for Racecar_147:
(13, 99888), (Start: 21 @99924 has 2 MA's), (37, 99966), (55, 100089), (65, 100197), (72, 100263), (77, 100290),

Gene: ReginaGlobina_145 Start: 98753, Stop: 99169, Start Num: 18
Candidate Starts for ReginaGlobina_145:
(18, 98753), (47, 98870), (52, 98912), (54, 98924), (68, 99077),

Gene: Rockabye_147 Start: 90427, Stop: 90843, Start Num: 21
Candidate Starts for Rockabye_147:
(Start: 21 @90427 has 2 MA's), (37, 90469), (55, 90592), (65, 90700), (72, 90766), (77, 90793),

Gene: SJReid_148 Start: 89398, Stop: 89817, Start Num: 21
Candidate Starts for SJReid_148:
(Start: 21 @89398 has 2 MA's), (41, 89458), (52, 89548), (65, 89671), (70, 89722), (82, 89806),

Gene: Saftant_4 Start: 1704, Stop: 2072, Start Num: 36
Candidate Starts for Saftant_4:
(6, 1482), (7, 1488), (8, 1581), (11, 1614), (Start: 36 @1704 has 6 MA's), (44, 1758), (64, 1917), (78, 2031),

Gene: Sham_183 Start: 99378, Stop: 99734, Start Num: 32
Candidate Starts for Sham_183:
(Start: 24 @99366 has 5 MA's), (Start: 32 @99378 has 1 MA's), (41, 99417), (45, 99453), (48, 99462), (49, 99468), (76, 99687),

Gene: Sicarius2_7 Start: 6118, Stop: 6459, Start Num: 33

Candidate Starts for Sicarius2_7:
(Start: 33 @6118 has 3 MA's), (75, 6406),

Gene: Sonali_28 Start: 27905, Stop: 28276, Start Num: 25
Candidate Starts for Sonali_28:
(Start: 25 @27905 has 1 MA's), (62, 28127),

Gene: Speedwell_5 Start: 1643, Stop: 2011, Start Num: 36
Candidate Starts for Speedwell_5:
(Start: 36 @1643 has 6 MA's), (40, 1664), (44, 1697),

Gene: Sunshine23_30 Start: 27923, Stop: 28294, Start Num: 25
Candidate Starts for Sunshine23_30:
(Start: 25 @27923 has 1 MA's), (62, 28145),

Gene: TMaxx_2 Start: 552, Stop: 920, Start Num: 25
Candidate Starts for TMaxx_2:
(Start: 25 @552 has 1 MA's), (62, 771), (67, 810),

Gene: Talia1610_148 Start: 99939, Stop: 100352, Start Num: 21
Candidate Starts for Talia1610_148:
(13, 99903), (Start: 21 @99939 has 2 MA's), (37, 99981), (55, 100104), (65, 100212), (72, 100278), (77, 100305),

Gene: TunaTartare_192 Start: 101415, Stop: 101783, Start Num: 24
Candidate Starts for TunaTartare_192:
(Start: 24 @101415 has 5 MA's), (Start: 32 @101427 has 1 MA's), (41, 101466), (45, 101502), (48, 101511), (49, 101517), (76, 101736),

Gene: Verse_4 Start: 1741, Stop: 2109, Start Num: 36
Candidate Starts for Verse_4:
(Start: 36 @1741 has 6 MA's), (64, 1954), (66, 1993), (78, 2071),

Gene: WaddleDee_139 Start: 93711, Stop: 94130, Start Num: 21
Candidate Starts for WaddleDee_139:
(Start: 21 @93711 has 2 MA's), (37, 93753), (48, 93825), (55, 93876), (62, 93969), (65, 93984), (72, 94050), (77, 94077), (82, 94119),

Gene: Wakanda_159 Start: 86971, Stop: 87333, Start Num: 24
Candidate Starts for Wakanda_159:
(15, 86935), (Start: 24 @86971 has 5 MA's), (45, 87046), (46, 87049), (48, 87055), (49, 87061), (63, 87196), (76, 87286), (77, 87289),

Gene: Wyborn_7 Start: 5979, Stop: 6320, Start Num: 33
Candidate Starts for Wyborn_7:
(Start: 33 @5979 has 3 MA's), (75, 6267),

Gene: phiCAM_04 Start: 1710, Stop: 2057, Start Num: 40
Candidate Starts for phiCAM_04:
(Start: 36 @1689 has 6 MA's), (40, 1710), (44, 1743), (64, 1902), (78, 2019),