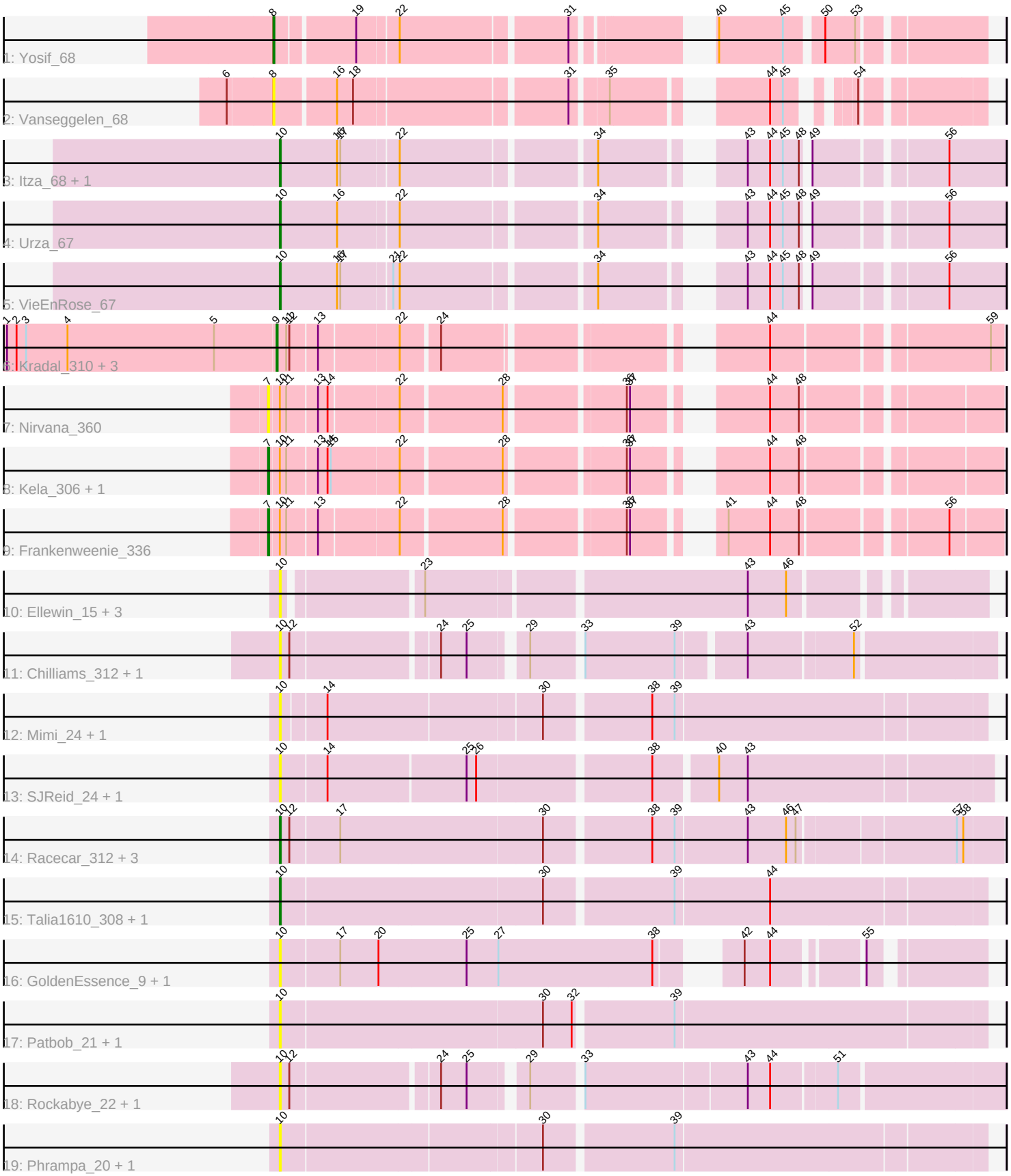
Pham 200430


1: Yosif_68
2: Vanseggelen_68
3: Itza_68 + 1
4: Urza_67
5: VieEnRose_67
6: Kradal_310 + 3
7: Nirvana_360
8: Kela_306 + 1
9: Frankenweenie_336
10: Ellewin_15 + 3
11: Chilliams_312 + 1
12: Mimi_24 + 1
13: SJReid_24 + 1
14: Racecar_312 + 3
15: Talia1610_308 + 1
16: GoldenEssence_9 + 1
17: Patbob_21 + 1
18: Rockabye_22 + 1
19: Phrampa_20 + 1

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 200430 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 200430 has 38 members, 22 are drafts.

Phages represented in each track:
- Track 1 : Yosif_68
- Track 2 : Vanseggelen_68
- Track 3 : Itza_68, Celia_65
- Track 4 : Urza_67
- Track 5 : VieEnRose_67
- Track 6 : Kradal_310, EhyElimayoE_313, Quantum_308, Satis_310
- Track 7 : Nirvana_360
- Track 8 : Kela_306, JustBecause_308
- Track 9 : Frankenweenie_336
- Track 10 : Ellewin_15, KSunshine22_15, KSunshine22_307, Ellewin_314
- Track 11 : Chilliams_312, Chilliams_21
- Track 12 : Mimi_24, Mimi_314
- Track 13 : SJReid_24, SJReid_335
- Track 14 : Racecar_312, Bloom_24, Bloom_311, Racecar_23
- Track 15 : Talia1610_308, Talia1610_22
- Track 16 : GoldenEssence_9, GoldenEssence_291
- Track 17 : Patbob_21, Patbob_311
- Track 18 : Rockabye_22, Rockabye_321
- Track 19 : Phrampa_20, Phrampa_305

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

The start number called the most often in the published annotations is 10, it was called in 8 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Bloom_24, Bloom_311, Celia_65, Chilliams_21, Chilliams_312, Ellewin_15, Ellewin_314, GoldenEssence_291, GoldenEssence_9, Itza_68, KSunshine22_15, KSunshine22_307, Mimi_24, Mimi_314, Patbob_21, Patbob_311, Phrampa_20, Phrampa_305, Racecar_23, Racecar_312, Rockabye_22, Rockabye_321,

SJReid_24, SJReid_335, Talia1610_22, Talia1610_308, Urza_67, VieEnRose_67,

Genes that have the "Most Annotated" start but do not call it:
• Frankenweenie_336, JustBecause_308, Kela_306, Nirvana_360,

Genes that do not have the "Most Annotated" start:
• EhyElimayoE_313, Kradal_310, Quantum_308, Satis_310, Vanseggelen_68, Yosif_68,

Summary by start number:

Start 7:
• Found in 4 of 38 (10.5%) of genes in pham
• Manual Annotations of this start: 3 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Frankenweenie_336 (BM), JustBecause_308 (BM), Kela_306 (BM), Nirvana_360 (BM),

Start 8:
• Found in 2 of 38 (5.3%) of genes in pham
• Manual Annotations of this start: 1 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Vanseggelen_68 (BD3), Yosif_68 (BD3),

Start 9:
• Found in 4 of 38 (10.5%) of genes in pham
• Manual Annotations of this start: 4 of 16
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EhyElimayoE_313 (BM), Kradal_310 (BM), Quantum_308 (BM), Satis_310 (BM),

Start 10:
• Found in 32 of 38 (84.2%) of genes in pham
• Manual Annotations of this start: 8 of 16
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Bloom_24 (FC), Bloom_311 (FC), Celia_65 (BD6), Chilliams_21 (FC), Chilliams_312 (FC), Ellewin_15 (FC), Ellewin_314 (FC), GoldenEssence_291 (FC), GoldenEssence_9 (FC), Itza_68 (BD6), KSunshine22_15 (FC), KSunshine22_307 (FC), Mimi_24 (FC), Mimi_314 (FC), Patbob_21 (FC), Patbob_311 (FC), Phrampa_20 (FC), Phrampa_305 (FC), Racecar_23 (FC), Racecar_312 (FC), Rockabye_22 (FC), Rockabye_321 (FC), SJReid_24 (FC), SJReid_335 (FC), Talia1610_22 (FC), Talia1610_308 (FC), Urza_67 (BD6), VieEnRose_67 (BD6),

Summary by clusters:

There are 4 clusters represented in this pham: BM, FC, BD6, BD3,

Info for manual annotations of cluster BD3:
•Start number 8 was manually annotated 1 time for cluster BD3.

Info for manual annotations of cluster BD6:
•Start number 10 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster BM:
•Start number 7 was manually annotated 3 times for cluster BM.
•Start number 9 was manually annotated 4 times for cluster BM.

Info for manual annotations of cluster FC:
•Start number 10 was manually annotated 4 times for cluster FC.

Gene Information:

Gene: Bloom_24 Start: 10896, Stop: 11540, Start Num: 10
Candidate Starts for Bloom_24:
(Start: 10 @10896 has 8 MA's), (12, 10905), (17, 10950), (30, 11136), (38, 11229), (39, 11250), (43, 11316), (46, 11352), (47, 11361), (57, 11499), (58, 11505),

Gene: Bloom_311 Start: 184371, Stop: 185015, Start Num: 10
Candidate Starts for Bloom_311:
(Start: 10 @184371 has 8 MA's), (12, 184380), (17, 184425), (30, 184611), (38, 184704), (39, 184725), (43, 184791), (46, 184827), (47, 184836), (57, 184974), (58, 184980),

Gene: Celia_65 Start: 44395, Stop: 43802, Start Num: 10
Candidate Starts for Celia_65:
(Start: 10 @44395 has 8 MA's), (16, 44341), (17, 44338), (22, 44287), (34, 44119), (43, 44017), (44, 43996), (45, 43984), (48, 43969), (49, 43966), (56, 43855),

Gene: Chilliams_312 Start: 183128, Stop: 183736, Start Num: 10
Candidate Starts for Chilliams_312:
(Start: 10 @183128 has 8 MA's), (12, 183137), (24, 183266), (25, 183290), (29, 183335), (33, 183377), (39, 183461), (43, 183518), (52, 183611),

Gene: Chilliams_21 Start: 10394, Stop: 11002, Start Num: 10
Candidate Starts for Chilliams_21:
(Start: 10 @10394 has 8 MA's), (12, 10403), (24, 10532), (25, 10556), (29, 10601), (33, 10643), (39, 10727), (43, 10784), (52, 10877),

Gene: EhyElimayoE_313 Start: 170133, Stop: 169549, Start Num: 9
Candidate Starts for EhyElimayoE_313:
(1, 170385), (2, 170376), (3, 170367), (4, 170328), (5, 170190), (Start: 9 @170133 has 4 MA's), (11, 170124), (12, 170121), (13, 170097), (22, 170025), (24, 169992), (44, 169746), (59, 169560),

Gene: Ellewin_15 Start: 6471, Stop: 7067, Start Num: 10
Candidate Starts for Ellewin_15:
(Start: 10 @6471 has 8 MA's), (23, 6588), (43, 6873), (46, 6909),

Gene: Ellewin_314 Start: 185585, Stop: 186181, Start Num: 10
Candidate Starts for Ellewin_314:
(Start: 10 @185585 has 8 MA's), (23, 185702), (43, 185987), (46, 186023),

Gene: Frankenweenie_336 Start: 182525, Stop: 181935, Start Num: 7
Candidate Starts for Frankenweenie_336:

(Start: 7 @182525 has 3 MA's), (Start: 10 @182516 has 8 MA's), (11, 182510), (13, 182483), (22, 182411), (28, 182321), (36, 182222), (37, 182219), (41, 182168), (44, 182129), (48, 182102), (56, 181982),

Gene: GoldenEssence_9 Start: 5099, Stop: 5680, Start Num: 10
Candidate Starts for GoldenEssence_9:
(Start: 10 @5099 has 8 MA's), (17, 5153), (20, 5189), (25, 5270), (27, 5300), (38, 5444), (42, 5489), (44, 5513), (55, 5585),

Gene: GoldenEssence_291 Start: 175652, Stop: 176233, Start Num: 10
Candidate Starts for GoldenEssence_291:
(Start: 10 @175652 has 8 MA's), (17, 175706), (20, 175742), (25, 175823), (27, 175853), (38, 175997), (42, 176042), (44, 176066), (55, 176138),

Gene: Itza_68 Start: 44328, Stop: 43735, Start Num: 10
Candidate Starts for Itza_68:
(Start: 10 @44328 has 8 MA's), (16, 44274), (17, 44271), (22, 44220), (34, 44052), (43, 43950), (44, 43929), (45, 43917), (48, 43902), (49, 43899), (56, 43788),

Gene: JustBecause_308 Start: 166368, Stop: 165775, Start Num: 7
Candidate Starts for JustBecause_308:
(Start: 7 @166368 has 3 MA's), (Start: 10 @166359 has 8 MA's), (11, 166353), (13, 166326), (14, 166317), (15, 166314), (22, 166251), (28, 166161), (36, 166062), (37, 166059), (44, 165969), (48, 165942),

Gene: KSunshine22_15 Start: 6996, Stop: 7592, Start Num: 10
Candidate Starts for KSunshine22_15:
(Start: 10 @6996 has 8 MA's), (23, 7113), (43, 7398), (46, 7434),

Gene: KSunshine22_307 Start: 183897, Stop: 184493, Start Num: 10
Candidate Starts for KSunshine22_307:
(Start: 10 @183897 has 8 MA's), (23, 184014), (43, 184299), (46, 184335),

Gene: Kela_306 Start: 167263, Stop: 166670, Start Num: 7
Candidate Starts for Kela_306:
(Start: 7 @167263 has 3 MA's), (Start: 10 @167254 has 8 MA's), (11, 167248), (13, 167221), (14, 167212), (15, 167209), (22, 167146), (28, 167056), (36, 166957), (37, 166954), (44, 166864), (48, 166837),

Gene: Kradal_310 Start: 170130, Stop: 169546, Start Num: 9
Candidate Starts for Kradal_310:
(1, 170382), (2, 170373), (3, 170364), (4, 170325), (5, 170187), (Start: 9 @170130 has 4 MA's), (11, 170121), (12, 170118), (13, 170094), (22, 170022), (24, 169989), (44, 169743), (59, 169557),

Gene: Mimi_24 Start: 10326, Stop: 10952, Start Num: 10
Candidate Starts for Mimi_24:
(Start: 10 @10326 has 8 MA's), (14, 10365), (30, 10557), (38, 10650), (39, 10671),

Gene: Mimi_314 Start: 182986, Stop: 183612, Start Num: 10
Candidate Starts for Mimi_314:
(Start: 10 @182986 has 8 MA's), (14, 183025), (30, 183217), (38, 183310), (39, 183331),

Gene: Nirvana_360 Start: 185496, Stop: 184906, Start Num: 7

Candidate Starts for Nirvana_360:
(Start: 7 @185496 has 3 MA's), (Start: 10 @185487 has 8 MA's), (11, 185481), (13, 185454), (14, 185445), (22, 185382), (28, 185292), (36, 185193), (37, 185190), (44, 185100), (48, 185073),

Gene: Patbob_21 Start: 10846, Stop: 11484, Start Num: 10
Candidate Starts for Patbob_21:
(Start: 10 @10846 has 8 MA's), (30, 11086), (32, 11113), (39, 11200),

Gene: Patbob_311 Start: 186305, Stop: 186943, Start Num: 10
Candidate Starts for Patbob_311:
(Start: 10 @186305 has 8 MA's), (30, 186545), (32, 186572), (39, 186659),

Gene: Phrampa_20 Start: 8984, Stop: 9613, Start Num: 10
Candidate Starts for Phrampa_20:
(Start: 10 @8984 has 8 MA's), (30, 9218), (39, 9332),

Gene: Phrampa_305 Start: 185355, Stop: 185984, Start Num: 10
Candidate Starts for Phrampa_305:
(Start: 10 @185355 has 8 MA's), (30, 185589), (39, 185703),

Gene: Quantum_308 Start: 170124, Stop: 169540, Start Num: 9
Candidate Starts for Quantum_308:
(1, 170376), (2, 170367), (3, 170358), (4, 170319), (5, 170181), (Start: 9 @170124 has 4 MA's), (11, 170115), (12, 170112), (13, 170088), (22, 170016), (24, 169983), (44, 169737), (59, 169551),

Gene: Racecar_312 Start: 184605, Stop: 185249, Start Num: 10
Candidate Starts for Racecar_312:
(Start: 10 @184605 has 8 MA's), (12, 184614), (17, 184659), (30, 184845), (38, 184938), (39, 184959), (43, 185025), (46, 185061), (47, 185070), (57, 185208), (58, 185214),

Gene: Racecar_23 Start: 10896, Stop: 11540, Start Num: 10
Candidate Starts for Racecar_23:
(Start: 10 @10896 has 8 MA's), (12, 10905), (17, 10950), (30, 11136), (38, 11229), (39, 11250), (43, 11316), (46, 11352), (47, 11361), (57, 11499), (58, 11505),

Gene: Rockabye_22 Start: 10165, Stop: 10788, Start Num: 10
Candidate Starts for Rockabye_22:
(Start: 10 @10165 has 8 MA's), (12, 10174), (24, 10303), (25, 10327), (29, 10372), (33, 10414), (43, 10561), (44, 10582), (51, 10639),

Gene: Rockabye_321 Start: 182778, Stop: 183401, Start Num: 10
Candidate Starts for Rockabye_321:
(Start: 10 @182778 has 8 MA's), (12, 182787), (24, 182916), (25, 182940), (29, 182985), (33, 183027), (43, 183174), (44, 183195), (51, 183252),

Gene: SJReid_24 Start: 10577, Stop: 11209, Start Num: 10
Candidate Starts for SJReid_24:
(Start: 10 @10577 has 8 MA's), (14, 10619), (25, 10745), (26, 10754), (38, 10907), (40, 10961), (43, 10988),

Gene: SJReid_335 Start: 183416, Stop: 184048, Start Num: 10
Candidate Starts for SJReid_335:

(Start: 10 @183416 has 8 MA's), (14, 183458), (25, 183584), (26, 183593), (38, 183746), (40, 183800), (43, 183827),

Gene: Satis_310 Start: 170467, Stop: 169883, Start Num: 9
Candidate Starts for Satis_310:
(1, 170719), (2, 170710), (3, 170701), (4, 170662), (5, 170524), (Start: 9 @170467 has 4 MA's), (11, 170458), (12, 170455), (13, 170431), (22, 170359), (24, 170326), (44, 170080), (59, 169894),

Gene: Talia1610_308 Start: 184802, Stop: 185437, Start Num: 10
Candidate Starts for Talia1610_308:
(Start: 10 @184802 has 8 MA's), (30, 185042), (39, 185156), (44, 185243),

Gene: Talia1610_22 Start: 10330, Stop: 10965, Start Num: 10
Candidate Starts for Talia1610_22:
(Start: 10 @10330 has 8 MA's), (30, 10570), (39, 10684), (44, 10771),

Gene: Urza_67 Start: 44349, Stop: 43756, Start Num: 10
Candidate Starts for Urza_67:
(Start: 10 @44349 has 8 MA's), (16, 44295), (22, 44241), (34, 44073), (43, 43971), (44, 43950), (45, 43938), (48, 43923), (49, 43920), (56, 43809),

Gene: Vanseggelen_68 Start: 43163, Stop: 42615, Start Num: 8
Candidate Starts for Vanseggelen_68:
(6, 43202), (Start: 8 @43163 has 1 MA's), (16, 43109), (18, 43094), (31, 42908), (35, 42878), (44, 42767), (45, 42755), (54, 42716),

Gene: VieEnRose_67 Start: 44202, Stop: 43609, Start Num: 10
Candidate Starts for VieEnRose_67:
(Start: 10 @44202 has 8 MA's), (16, 44148), (17, 44145), (21, 44100), (22, 44094), (34, 43926), (43, 43824), (44, 43803), (45, 43791), (48, 43776), (49, 43773), (56, 43662),

Gene: Yosif_68 Start: 44529, Stop: 43960, Start Num: 8
Candidate Starts for Yosif_68:
(Start: 8 @44529 has 1 MA's), (19, 44460), (22, 44424), (31, 44277), (40, 44184), (45, 44124), (50, 44094), (53, 44067),