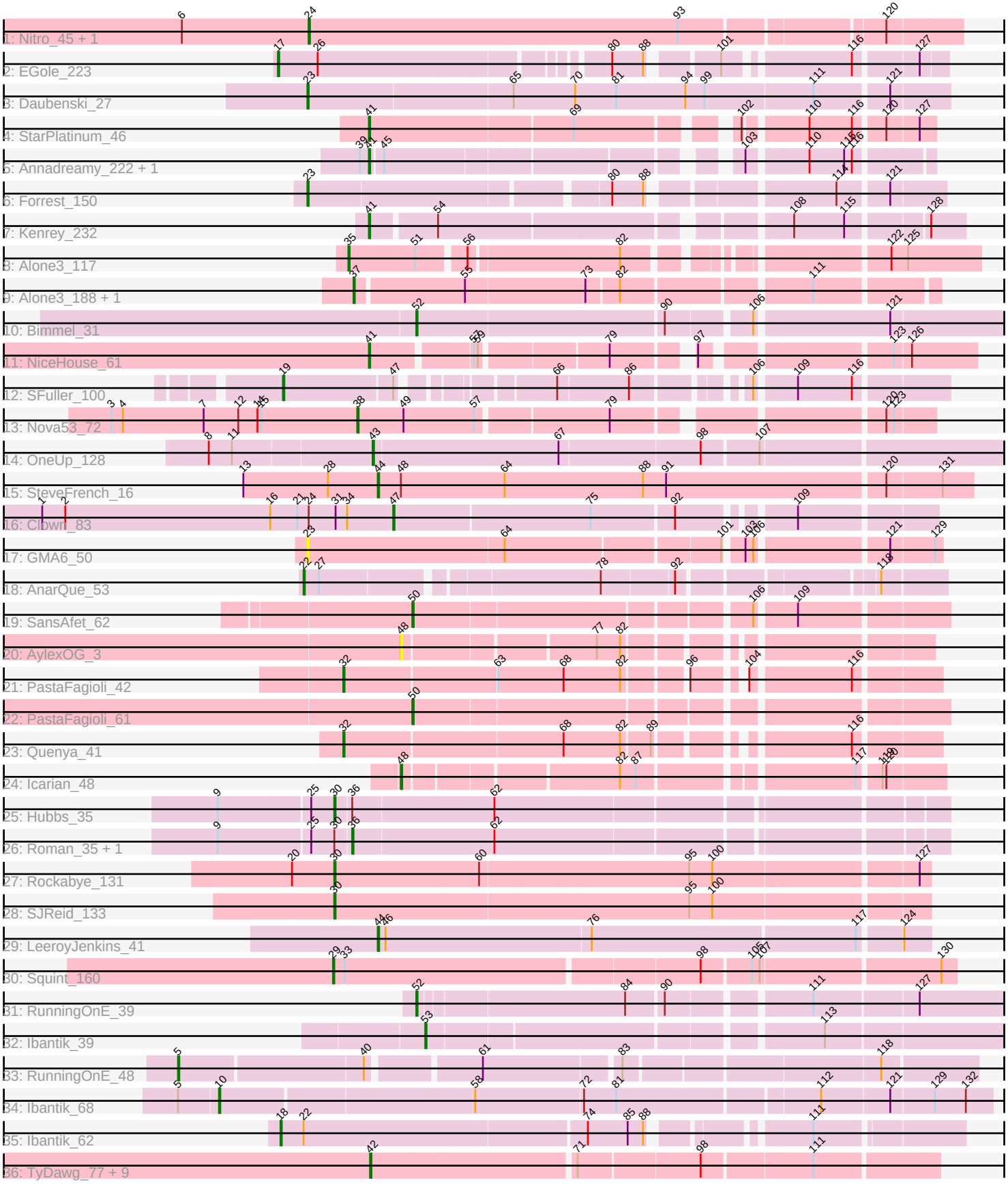
# Pham 330953


1: Nitro_45 + 1
2: EGole_223
3: Daubenski_27
4: StarPlatinum_46
5: Annadreamy_222 + 1
6: Forrest_150
7: Kenrey_232
8: Alone3_117
9: Alone3_188 + 1
10: Bimmel_31
11: NiceHouse_61
12: SFuller_100
13: Nova53_72
14: OneUp_128
15: SteveFrench_16
16: Clown_83
17: GMA6_50
18: AnarQue_53
19: SansAfet_62
20: AylexOG_3
21: PastaFagioli_42
22: PastaFagioli_61
23: Quenya_41
24: Icarian_48
25: Hubbs_35
26: Roman_35 + 1
27: Rockabye_131
28: SJReid_133
29: LeeroyJenkins_41
30: Squint_160
31: RunningOnE_39
32: Ibantik_39
33: RunningOnE_48
34: Ibantik_68
35: Ibantik_62
36: TyDawg_77 + 9

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 330953 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330953 has 49 members, 4 are drafts.

Phages represented in each track:
- Track 1 : Nitro_45, Community_49
- Track 2 : EGole_223
- Track 3 : Daubenski_27
- Track 4 : StarPlatinum_46
- Track 5 : Annadreamy_222, Limpid_229
- Track 6 : Forrest_150
- Track 7 : Kenrey_232
- Track 8 : Alone3_117
- Track 9 : Alone3_188, Talos_188
- Track 10 : Bimmel_31
- Track 11 : NiceHouse_61
- Track 12 : SFuller_100
- Track 13 : Nova53_72
- Track 14 : OneUp_128
- Track 15 : SteveFrench_16
- Track 16 : Clown_83
- Track 17 : GMA6_50
- Track 18 : AnarQue_53
- Track 19 : SansAfet_62
- Track 20 : AylexOG_3
- Track 21 : PastaFagioli_42
- Track 22 : PastaFagioli_61
- Track 23 : Quenya_41
- Track 24 : Icarian_48
- Track 25 : Hubbs_35
- Track 26 : Roman_35, DejaVu_36
- Track 27 : Rockabye_131
- Track 28 : SJReid_133
- Track 29 : LeeroyJenkins_41
- Track 30 : Squint_160
- Track 31 : RunningOnE_39
- Track 32 : Ibantik_39
- Track 33 : RunningOnE_48
- Track 34 : Ibantik_68
- Track 35 : Ibantik_62
- Track 36 : TyDawg_77, Dulcita_78, Diminimus_78, Bongo_77, FreakyGoo_79, Skinny_80, PegLeg_76, TpudiCK_79, LilhomieP_77, Izel_78

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

The start number called the most often in the published annotations is 42, it was called in 9 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Bongo_77, Diminimus_78, Dulcita_78, FreakyGoo_79, Izel_78, LilhomieP_77, PegLeg_76, Skinny_80, TpudiCK_79, TyDawg_77,

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

Genes that do not have the "Most Annotated" start:
• Alone3_117, Alone3_188, AnarQue_53, Annadreamy_222, AylexOG_3, Bimmel_31, Clown_83, Community_49, Daubenski_27, DejaVu_36, EGole_223, Forrest_150, GMA6_50, Hubbs_35, Ibantik_39, Ibantik_62, Ibantik_68, Icarian_48, Kenrey_232, LeeroyJenkins_41, Limpid_229, NiceHouse_61, Nitro_45, Nova53_72, OneUp_128, PastaFagioli_42, PastaFagioli_61, Quenya_41, Rockabye_131, Roman_35, RunningOnE_39, RunningOnE_48, SFuller_100, SJReid_133, SansAfet_62, Squint_160, StarPlatinum_46, SteveFrench_16, Talos_188,

**Summary by start number:**

Start 5:
• Found in 2 of 49 ( 4.1% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 50.0% of time when present
• Phage (with cluster) where this start called: RunningOnE_48 (JN),

Start 10:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ibantik_68 (JN),

Start 17:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EGole_223 (BE1),

Start 18:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ibantik_62 (JN),

Start 19:
• Found in 1 of 49 ( 2.0% ) of genes in pham

• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SFuller_100 (CF),

Start 22:
• Found in 2 of 49 ( 4.1% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 50.0% of time when present
• Phage (with cluster) where this start called: AnarQue_53 (DR),

Start 23:
• Found in 3 of 49 ( 6.1% ) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Daubenski_27 (BE1), Forrest_150 (BK1), GMA6_50 (DQ),

Start 24:
• Found in 3 of 49 ( 6.1% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Community_49 (AZ1), Nitro_45 (AZ1),

Start 29:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Squint_160 (J),

Start 30:
• Found in 5 of 49 ( 10.2% ) of genes in pham
• Manual Annotations of this start: 3 of 45
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Hubbs_35 (ED1), Rockabye_131 (FC), SJReid_133 (FC),

Start 32:
• Found in 2 of 49 ( 4.1% ) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PastaFagioli_42 (EB), Quenya_41 (EB),

Start 35:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alone3_117 (BS),

Start 36:
• Found in 3 of 49 ( 6.1% ) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 66.7% of time when present
• Phage (with cluster) where this start called: DejaVu_36 (ED1), Roman_35 (ED1),

Start 37:
• Found in 2 of 49 ( 4.1% ) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alone3_188 (BS), Talos_188 (BS),

Start 38:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nova53_72 (CG),

Start 41:
• Found in 5 of 49 ( 10.2% ) of genes in pham
• Manual Annotations of this start: 5 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Annadreamy_222 (BK1), Kenrey_232 (BK1), Limpid_229 (BK1), NiceHouse_61 (CE), StarPlatinum_46 (BE2),

Start 42:
• Found in 10 of 49 ( 20.4% ) of genes in pham
• Manual Annotations of this start: 9 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bongo_77 (M1), Diminimus_78 (M1), Dulcita_78 (M1), FreakyGoo_79 (M1), Izel_78 (M1), LilhomieP_77 (M1), PegLeg_76 (M1), Skinny_80 (M1), TpudiCK_79 (M1), TyDawg_77 (M1),

Start 43:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: OneUp_128 (CQ2),

Start 44:
• Found in 2 of 49 ( 4.1% ) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LeeroyJenkins_41 (GB), SteveFrench_16 (CS2),

Start 47:
• Found in 2 of 49 ( 4.1% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Clown_83 (DC2),

Start 48:
• Found in 3 of 49 ( 6.1% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 66.7% of time when present
• Phage (with cluster) where this start called: AylexOG_3 (EB), Icarian_48 (EB),

Start 50:
• Found in 2 of 49 ( 4.1% ) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PastaFagioli_61 (EB), SansAfet_62 (EB),

Start 52:
• Found in 2 of 49 ( 4.1% ) of genes in pham
• Manual Annotations of this start: 2 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bimmel_31 (BT), RunningOnE_39 (JN),

Start 53:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• Manual Annotations of this start: 1 of 45
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ibantik_39 (JN),

**Summary by clusters:**

There are 21 clusters represented in this pham: AZ1, DQ, FC, DR, J, CG, CF, CE, EB, BT, JN, ED1, M1, BK1, BS, BE2, CQ2, BE1, DC2, GB, CS2,

Info for manual annotations of cluster AZ1:
•Start number 24 was manually annotated 1 time for cluster AZ1.

Info for manual annotations of cluster BE1:
•Start number 17 was manually annotated 1 time for cluster BE1.
•Start number 23 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 41 was manually annotated 1 time for cluster BE2.

Info for manual annotations of cluster BK1:
•Start number 23 was manually annotated 1 time for cluster BK1.
•Start number 41 was manually annotated 3 times for cluster BK1.

Info for manual annotations of cluster BS:
•Start number 35 was manually annotated 1 time for cluster BS.
•Start number 37 was manually annotated 2 times for cluster BS.

Info for manual annotations of cluster BT:
•Start number 52 was manually annotated 1 time for cluster BT.

Info for manual annotations of cluster CE:
•Start number 41 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CF:
•Start number 19 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster CG:
•Start number 38 was manually annotated 1 time for cluster CG.

Info for manual annotations of cluster CQ2:
•Start number 43 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CS2:
•Start number 44 was manually annotated 1 time for cluster CS2.

Info for manual annotations of cluster DC2:
•Start number 47 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DR:
•Start number 22 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster EB:
•Start number 32 was manually annotated 2 times for cluster EB.
•Start number 48 was manually annotated 1 time for cluster EB.
•Start number 50 was manually annotated 2 times for cluster EB.

Info for manual annotations of cluster ED1:
•Start number 30 was manually annotated 1 time for cluster ED1.
•Start number 36 was manually annotated 2 times for cluster ED1.

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

Info for manual annotations of cluster GB:
•Start number 44 was manually annotated 1 time for cluster GB.

Info for manual annotations of cluster J:
•Start number 29 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster JN:
•Start number 5 was manually annotated 1 time for cluster JN.
•Start number 10 was manually annotated 1 time for cluster JN.
•Start number 18 was manually annotated 1 time for cluster JN.
•Start number 52 was manually annotated 1 time for cluster JN.
•Start number 53 was manually annotated 1 time for cluster JN.

Info for manual annotations of cluster M1:
•Start number 42 was manually annotated 9 times for cluster M1.

### *Gene Information:*

Gene: Alone3_117 Start: 62982, Stop: 63413, Start Num: 35
Candidate Starts for Alone3_117:
(Start: 35 @62982 has 1 MA's), (51, 63033), (56, 63066), (82, 63177), (122, 63345), (125, 63357),

Gene: Alone3_188 Start: 97401, Stop: 96985, Start Num: 37
Candidate Starts for Alone3_188:
(Start: 37 @97401 has 2 MA's), (55, 97320), (73, 97230), (82, 97206), (111, 97071),

Gene: AnarQue_53 Start: 46202, Stop: 45753, Start Num: 22
Candidate Starts for AnarQue_53:
(Start: 22 @46202 has 1 MA's), (27, 46190), (78, 45992), (92, 45938), (118, 45800),

Gene: Annadreamy_222 Start: 109759, Stop: 110133, Start Num: 41
Candidate Starts for Annadreamy_222:
(39, 109753), (Start: 41 @109759 has 5 MA's), (45, 109768), (103, 110005), (110, 110047), (115, 110074), (116, 110080),

Gene: AylexOG_3 Start: 681, Stop: 1040, Start Num: 48
Candidate Starts for AylexOG_3:
(Start: 48 @681 has 1 MA's), (77, 819), (82, 837),

Gene: Bimmel_31 Start: 19820, Stop: 19383, Start Num: 52
Candidate Starts for Bimmel_31:
(Start: 52 @19820 has 2 MA's), (90, 19634), (106, 19574), (121, 19475),

Gene: Bongo_77 Start: 49178, Stop: 49594, Start Num: 42
Candidate Starts for Bongo_77:
(Start: 42 @49178 has 9 MA's), (71, 49331), (98, 49421), (111, 49502),

Gene: Clown_83 Start: 53992, Stop: 54378, Start Num: 47
Candidate Starts for Clown_83:
(1, 53719), (2, 53737), (16, 53896), (21, 53917), (Start: 24 @53926 has 1 MA's), (31, 53947), (34, 53956), (Start: 47 @53992 has 1 MA's), (75, 54142), (92, 54202), (109, 54277),

Gene: Community_49 Start: 35475, Stop: 35966, Start Num: 24
Candidate Starts for Community_49:
(6, 35376), (Start: 24 @35475 has 1 MA's), (93, 35763), (120, 35910),

Gene: Daubenski_27 Start: 12504, Stop: 12022, Start Num: 23
Candidate Starts for Daubenski_27:
(Start: 23 @12504 has 2 MA's), (65, 12348), (70, 12300), (81, 12270), (94, 12216), (99, 12201), (111, 12120), (121, 12066),

Gene: DejaVu_36 Start: 15500, Stop: 15066, Start Num: 36
Candidate Starts for DejaVu_36:
(9, 15599), (25, 15530), (Start: 30 @15512 has 3 MA's), (Start: 36 @15500 has 2 MA's), (62, 15392),

Gene: Diminimus_78 Start: 49173, Stop: 49589, Start Num: 42
Candidate Starts for Diminimus_78:
(Start: 42 @49173 has 9 MA's), (71, 49326), (98, 49416), (111, 49497),

Gene: Dulcita_78 Start: 49174, Stop: 49590, Start Num: 42
Candidate Starts for Dulcita_78:
(Start: 42 @49174 has 9 MA's), (71, 49327), (98, 49417), (111, 49498),

Gene: EGole_223 Start: 113552, Stop: 114001, Start Num: 17
Candidate Starts for EGole_223:
(Start: 17 @113552 has 1 MA's), (26, 113582), (80, 113783), (88, 113807), (101, 113852), (116, 113936), (127, 113981),

Gene: Forrest_150 Start: 82816, Stop: 83256, Start Num: 23
Candidate Starts for Forrest_150:
(Start: 23 @82816 has 2 MA's), (80, 83032), (88, 83056), (114, 83179), (121, 83215),

Gene: FreakyGoo_79 Start: 49653, Stop: 50069, Start Num: 42
Candidate Starts for FreakyGoo_79:
(Start: 42 @49653 has 9 MA's), (71, 49806), (98, 49896), (111, 49977),

Gene: GMA6_50 Start: 43670, Stop: 43215, Start Num: 23
Candidate Starts for GMA6_50:
(Start: 23 @43670 has 2 MA's), (64, 43520), (101, 43364), (103, 43352), (106, 43346), (121, 43253), (129, 43220),

Gene: Hubbs_35 Start: 15724, Stop: 15278, Start Num: 30
Candidate Starts for Hubbs_35:
(9, 15811), (25, 15742), (Start: 30 @15724 has 3 MA's), (Start: 36 @15712 has 2 MA's), (62, 15604),

Gene: Ibantik_39 Start: 18281, Stop: 17859, Start Num: 53
Candidate Starts for Ibantik_39:
(Start: 53 @18281 has 1 MA's), (113, 17999),

Gene: Ibantik_68 Start: 30229, Stop: 30804, Start Num: 10
Candidate Starts for Ibantik_68:
(Start: 5 @30199 has 1 MA's), (Start: 10 @30229 has 1 MA's), (58, 30421), (72, 30502), (81, 30526), (112, 30676), (121, 30727), (129, 30760), (132, 30784),

Gene: Ibantik_62 Start: 26677, Stop: 27156, Start Num: 18
Candidate Starts for Ibantik_62:
(Start: 18 @26677 has 1 MA's), (Start: 22 @26695 has 1 MA's), (74, 26908), (85, 26938), (88, 26950), (111, 27049),

Gene: Icarian_48 Start: 33307, Stop: 33684, Start Num: 48
Candidate Starts for Icarian_48:
(Start: 48 @33307 has 1 MA's), (82, 33460), (87, 33472), (117, 33622), (119, 33637), (120, 33640),

Gene: Izel_78 Start: 49173, Stop: 49589, Start Num: 42
Candidate Starts for Izel_78:
(Start: 42 @49173 has 9 MA's), (71, 49326), (98, 49416), (111, 49497),

Gene: Kenrey_232 Start: 111193, Stop: 111606, Start Num: 41
Candidate Starts for Kenrey_232:
(Start: 41 @111193 has 5 MA's), (54, 111241), (108, 111484), (115, 111523), (128, 111580),

Gene: LeeroyJenkins_41 Start: 21889, Stop: 21473, Start Num: 44
Candidate Starts for LeeroyJenkins_41:
(Start: 44 @21889 has 2 MA's), (46, 21883), (76, 21724), (117, 21523), (124, 21493),

Gene: LilhomieP_77 Start: 49657, Stop: 50073, Start Num: 42
Candidate Starts for LilhomieP_77:
(Start: 42 @49657 has 9 MA's), (71, 49810), (98, 49900), (111, 49981),

Gene: Limpid_229 Start: 115072, Stop: 115446, Start Num: 41
Candidate Starts for Limpid_229:

(39, 115066), (Start: 41 @115072 has 5 MA's), (45, 115081), (103, 115318), (110, 115360), (115, 115387), (116, 115393),

Gene: NiceHouse_61 Start: 34862, Stop: 35269, Start Num: 41
Candidate Starts for NiceHouse_61:
(Start: 41 @34862 has 5 MA's), (57, 34934), (59, 34937), (79, 35027), (97, 35078), (123, 35207), (126, 35219),

Gene: Nitro_45 Start: 34067, Stop: 34558, Start Num: 24
Candidate Starts for Nitro_45:
(6, 33968), (Start: 24 @34067 has 1 MA's), (93, 34355), (120, 34502),

Gene: Nova53_72 Start: 59567, Stop: 59971, Start Num: 38
Candidate Starts for Nova53_72:
(3, 59375), (4, 59384), (7, 59447), (12, 59474), (14, 59489), (15, 59492), (Start: 38 @59567 has 1 MA's), (49, 59603), (57, 59657), (79, 59753), (120, 59936), (123, 59942),

Gene: OneUp_128 Start: 76398, Stop: 76883, Start Num: 43
Candidate Starts for OneUp_128:
(8, 76275), (11, 76293), (Start: 43 @76398 has 1 MA's), (67, 76539), (98, 76644), (107, 76686),

Gene: PastaFagioli_42 Start: 29819, Stop: 30232, Start Num: 32
Candidate Starts for PastaFagioli_42:
(Start: 32 @29819 has 2 MA's), (63, 29933), (68, 29984), (82, 30026), (96, 30068), (104, 30098), (116, 30170),

Gene: PastaFagioli_61 Start: 39171, Stop: 39551, Start Num: 50
Candidate Starts for PastaFagioli_61:
(Start: 50 @39171 has 2 MA's),

Gene: PegLeg_76 Start: 48918, Stop: 49334, Start Num: 42
Candidate Starts for PegLeg_76:
(Start: 42 @48918 has 9 MA's), (71, 49071), (98, 49161), (111, 49242),

Gene: Quenya_41 Start: 29700, Stop: 30113, Start Num: 32
Candidate Starts for Quenya_41:
(Start: 32 @29700 has 2 MA's), (68, 29865), (82, 29907), (89, 29928), (116, 30051),

Gene: Rockabye_131 Start: 87818, Stop: 88264, Start Num: 30
Candidate Starts for Rockabye_131:
(20, 87785), (Start: 30 @87818 has 3 MA's), (60, 87929), (95, 88088), (100, 88106), (127, 88256),

Gene: Roman_35 Start: 15559, Stop: 15125, Start Num: 36
Candidate Starts for Roman_35:
(9, 15658), (25, 15589), (Start: 30 @15571 has 3 MA's), (Start: 36 @15559 has 2 MA's), (62, 15451),

Gene: RunningOnE_39 Start: 18641, Stop: 18213, Start Num: 52
Candidate Starts for RunningOnE_39:
(Start: 52 @18641 has 2 MA's), (84, 18488), (90, 18461), (111, 18362), (127, 18284),

Gene: RunningOnE_48 Start: 22576, Stop: 22007, Start Num: 5
Candidate Starts for RunningOnE_48:
(Start: 5 @22576 has 1 MA's), (40, 22438), (61, 22360), (83, 22261), (118, 22075),

Gene: SFuller_100 Start: 58114, Stop: 58551, Start Num: 19
Candidate Starts for SFuller_100:
(Start: 19 @58114 has 1 MA's), (Start: 47 @58195 has 1 MA's), (66, 58291), (86, 58342), (106, 58414), (109, 58441), (116, 58483),

Gene: SJReid_133 Start: 86260, Stop: 86706, Start Num: 30
Candidate Starts for SJReid_133:
(Start: 30 @86260 has 3 MA's), (95, 86530), (100, 86548),

Gene: SansAfet_62 Start: 38774, Stop: 39154, Start Num: 50
Candidate Starts for SansAfet_62:
(Start: 50 @38774 has 2 MA's), (106, 39017), (109, 39044),

Gene: Skinny_80 Start: 50086, Stop: 50502, Start Num: 42
Candidate Starts for Skinny_80:
(Start: 42 @50086 has 9 MA's), (71, 50239), (98, 50329), (111, 50410),

Gene: Squint_160 Start: 85250, Stop: 85708, Start Num: 29
Candidate Starts for Squint_160:
(Start: 29 @85250 has 1 MA's), (33, 85259), (98, 85523), (105, 85559), (107, 85565), (130, 85697),

Gene: StarPlatinum_46 Start: 22656, Stop: 23042, Start Num: 41
Candidate Starts for StarPlatinum_46:
(Start: 41 @22656 has 5 MA's), (69, 22809), (102, 22911), (110, 22953), (116, 22986), (120, 23007), (127, 23031),

Gene: SteveFrench_16 Start: 15937, Stop: 16392, Start Num: 44
Candidate Starts for SteveFrench_16:
(13, 15832), (28, 15898), (Start: 44 @15937 has 2 MA's), (Start: 48 @15955 has 1 MA's), (64, 16036), (88, 16144), (91, 16162), (120, 16327), (131, 16369),

Gene: Talos_188 Start: 95931, Stop: 95515, Start Num: 37
Candidate Starts for Talos_188:
(Start: 37 @95931 has 2 MA's), (55, 95850), (73, 95760), (82, 95736), (111, 95601),

Gene: TpudiCK_79 Start: 49177, Stop: 49593, Start Num: 42
Candidate Starts for TpudiCK_79:
(Start: 42 @49177 has 9 MA's), (71, 49330), (98, 49420), (111, 49501),

Gene: TyDawg_77 Start: 49178, Stop: 49594, Start Num: 42
Candidate Starts for TyDawg_77:
(Start: 42 @49178 has 9 MA's), (71, 49331), (98, 49421), (111, 49502),