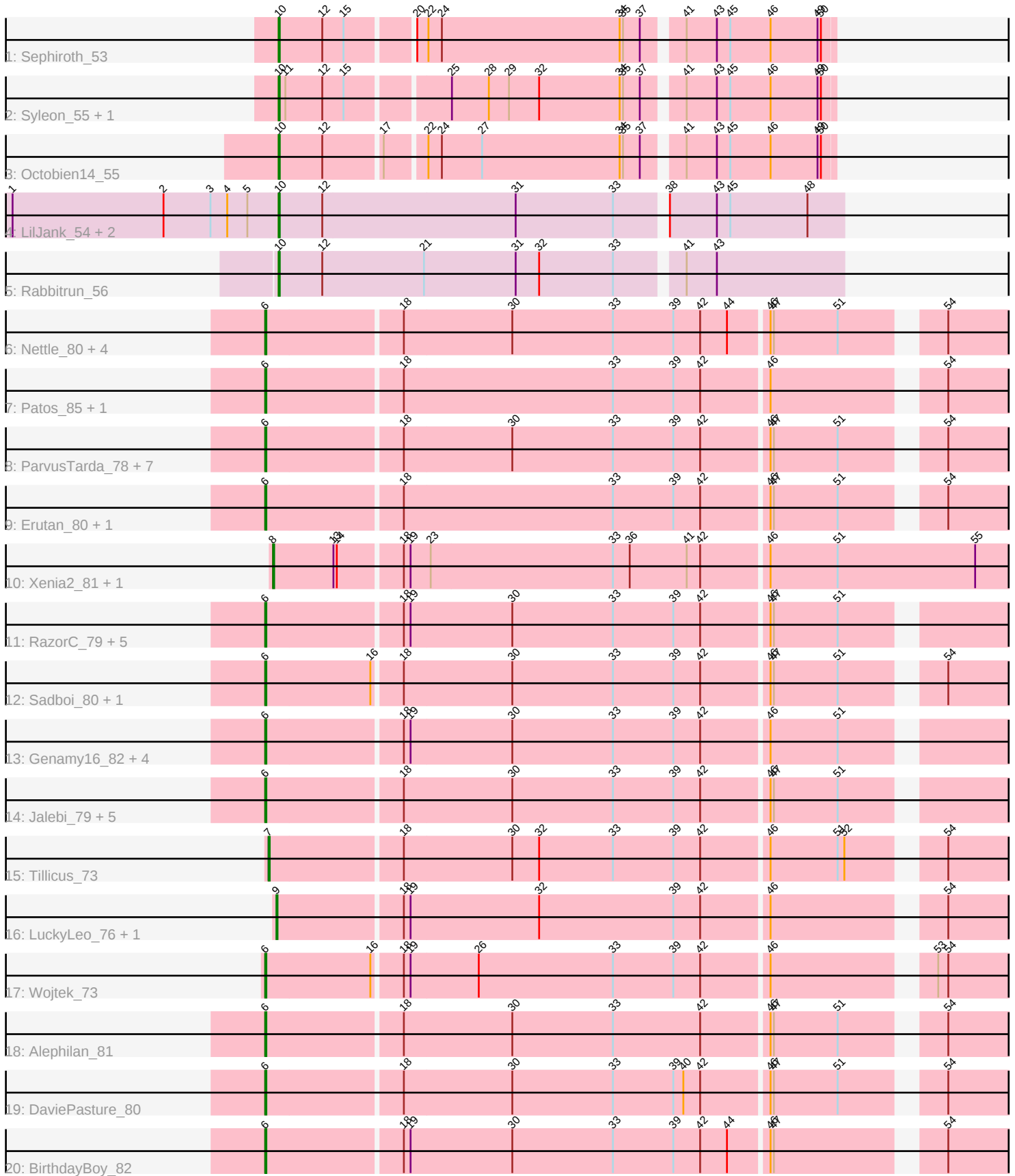


Pham 330920



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 330920 Report

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

Pham number 330920 has 53 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Sephiroth_53
- Track 2 : Syleon_55, Kudefre_54
- Track 3 : Octobien14_55
- Track 4 : LilJank_54, Trax_54, Neville_55
- Track 5 : Rabbitrun_56
- Track 6 : Nettle_80, Fulcrum_79, MoiGyank_83, GOATification_79, LavAbarElk_79
- Track 7 : Patos_85, NorManre_85
- Track 8 : ParvusTarda_78, Rota_77, Lambo_78, Gibbin_82, Lila22_80, Mima20_78, Yikes_81, OtterstedtS21_80
- Track 9 : Erutan_80, Ranch_81
- Track 10 : Xenia2_81, DumpTruck_81
- Track 11 : RazorC_79, Alyssamiracle_82, Stormer_79, Riduram_78, NovaSharks_81, Rumi_80
- Track 12 : Sadboi_80, GretellLyn_80
- Track 13 : Genamy16_82, Astralis_79, Jamemuya19_77, Avian_77, Charminar_78
- Track 14 : Jalebi_79, DoobyDoo_79, Sampudon_81, Zany_77, Pywacket_77, Rukungu_81
- Track 15 : Tillicus_73
- Track 16 : LuckyLeo_76, Apeppi_74
- Track 17 : Wojtek_73
- Track 18 : Alephilan_81
- Track 19 : DaviePasture_80
- Track 20 : BirthdayBoy_82

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

The start number called the most often in the published annotations is 6, it was called in 35 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alephilan_81, Alyssamiracle_82, Astralis_79, Avian_77, BirthdayBoy_82, Charminar_78, DaviePasture_80, DoobyDoo_79, Erutan_80, Fulcrum_79, GOATification_79, Genamy16_82, Gibbin_82, GretellLyn_80, Jalebi_79, Jamemuya19_77, Lambo_78, LavAbarElk_79, Lila22_80, Mima20_78, MoiGyank_83,

Nettle_80, NorManre_85, NovaSharks_81, OtterstedtS21_80, ParvusTarda_78, Patos_85, Pywacket_77, Ranch_81, RazorC_79, Riduram_78, Rota_77, Rukungu_81, Rumi_80, Sadboi_80, Sampudon_81, Stormer_79, Wojtek_73, Yikes_81, Zany_77,

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

-

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

- Apeppi_74, DumpTruck_81, Kudrefre_54, LilJank_54, LuckyLeo_76, Neville_55, Octobien14_55, Rabbitrun_56, Sephiroth_53, Syleon_55, Tillicus_73, Trax_54, Xenia2_81,

Summary by start number:

Start 6:

- Found in 40 of 53 (75.5%) of genes in pham
- Manual Annotations of this start: 35 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alephilan_81 (DV), Alyssamiracle_82 (DV), Astralis_79 (DV), Avian_77 (DV), BirthdayBoy_82 (DV), Charminar_78 (DV), DaviePasture_80 (DV), DoobyDoo_79 (DV), Erutan_80 (DV), Fulcrum_79 (DV), GOATification_79 (DV), Genamy16_82 (DV), Gibbin_82 (DV), Gretellyn_80 (DV), Jalebi_79 (DV), Jamemuya19_77 (DV), Lambo_78 (DV), LavAbarElk_79 (DV), Lila22_80 (DV), Mima20_78 (DV), MoiGyank_83 (DV), Nettle_80 (DV), NorManre_85 (DV), NovaSharks_81 (DV), OtterstedtS21_80 (DV), ParvusTarda_78 (DV), Patos_85 (DV), Pywacket_77 (DV), Ranch_81 (DV), RazorC_79 (DV), Riduram_78 (DV), Rota_77 (DV), Rukungu_81 (DV), Rumi_80 (DV), Sadboi_80 (DV), Sampudon_81 (DV), Stormer_79 (DV), Wojtek_73 (DV), Yikes_81 (DV), Zany_77 (DV),

Start 7:

- Found in 1 of 53 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tillicus_73 (DV),

Start 8:

- Found in 2 of 53 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DumpTruck_81 (DV), Xenia2_81 (DV),

Start 9:

- Found in 2 of 53 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apeppi_74 (DV), LuckyLeo_76 (DV),

Start 10:

- Found in 8 of 53 (15.1%) of genes in pham
- Manual Annotations of this start: 8 of 48
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Kudrefre_54 (DU1), LilJank_54 (DU2), Neville_55 (DU2), Octobien14_55 (DU1), Rabbitrun_56 (DU2), Sephiroth_53 (DU1), Syleon_55 (DU1), Trax_54 (DU2),

Summary by clusters:

There are 3 clusters represented in this pham: DV, DU1, DU2,

Info for manual annotations of cluster DU1:

- Start number 10 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 10 was manually annotated 4 times for cluster DU2.

Info for manual annotations of cluster DV:

- Start number 6 was manually annotated 35 times for cluster DV.
- Start number 7 was manually annotated 1 time for cluster DV.
- Start number 8 was manually annotated 2 times for cluster DV.
- Start number 9 was manually annotated 2 times for cluster DV.

Gene Information:

Gene: Alephilan_81 Start: 55807, Stop: 56439, Start Num: 6

Candidate Starts for Alephilan_81:

(Start: 6 @55807 has 35 MA's), (18, 55924), (30, 56020), (33, 56110), (42, 56188), (46, 56245), (47, 56248), (51, 56305), (54, 56380),

Gene: Alyssamiracle_82 Start: 54053, Stop: 54685, Start Num: 6

Candidate Starts for Alyssamiracle_82:

(Start: 6 @54053 has 35 MA's), (18, 54170), (19, 54176), (30, 54266), (33, 54356), (39, 54410), (42, 54434), (46, 54491), (47, 54494), (51, 54551),

Gene: Apeppi_74 Start: 54536, Stop: 55159, Start Num: 9

Candidate Starts for Apeppi_74:

(Start: 9 @54536 has 2 MA's), (18, 54644), (19, 54650), (32, 54764), (39, 54884), (42, 54908), (46, 54965), (54, 55100),

Gene: Astralis_79 Start: 53632, Stop: 54264, Start Num: 6

Candidate Starts for Astralis_79:

(Start: 6 @53632 has 35 MA's), (18, 53749), (19, 53755), (30, 53845), (33, 53935), (39, 53989), (42, 54013), (46, 54070), (51, 54130),

Gene: Avian_77 Start: 53781, Stop: 54413, Start Num: 6

Candidate Starts for Avian_77:

(Start: 6 @53781 has 35 MA's), (18, 53898), (19, 53904), (30, 53994), (33, 54084), (39, 54138), (42, 54162), (46, 54219), (51, 54279),

Gene: BirthdayBoy_82 Start: 55695, Stop: 56327, Start Num: 6

Candidate Starts for BirthdayBoy_82:

(Start: 6 @55695 has 35 MA's), (18, 55812), (19, 55818), (30, 55908), (33, 55998), (39, 56052), (42, 56076), (44, 56100), (46, 56133), (47, 56136), (54, 56268),

Gene: Charminar_78 Start: 53289, Stop: 53921, Start Num: 6

Candidate Starts for Charminar_78:

(Start: 6 @53289 has 35 MA's), (18, 53406), (19, 53412), (30, 53502), (33, 53592), (39, 53646), (42, 53670), (46, 53727), (51, 53787),

Gene: DaviePasture_80 Start: 55279, Stop: 55911, Start Num: 6

Candidate Starts for DaviePasture_80:

(Start: 6 @55279 has 35 MA's), (18, 55396), (30, 55492), (33, 55582), (39, 55636), (40, 55645), (42, 55660), (46, 55717), (47, 55720), (51, 55777), (54, 55852),

Gene: DoobyDoo_79 Start: 54163, Stop: 54795, Start Num: 6

Candidate Starts for DoobyDoo_79:

(Start: 6 @54163 has 35 MA's), (18, 54280), (30, 54376), (33, 54466), (39, 54520), (42, 54544), (46, 54601), (47, 54604), (51, 54661),

Gene: DumpTruck_81 Start: 54812, Stop: 55468, Start Num: 8

Candidate Starts for DumpTruck_81:

(Start: 8 @54812 has 2 MA's), (13, 54866), (14, 54869), (18, 54923), (19, 54929), (23, 54947), (33, 55109), (36, 55124), (41, 55175), (42, 55187), (46, 55244), (51, 55304), (55, 55427),

Gene: Erutan_80 Start: 55280, Stop: 55912, Start Num: 6

Candidate Starts for Erutan_80:

(Start: 6 @55280 has 35 MA's), (18, 55397), (33, 55583), (39, 55637), (42, 55661), (46, 55718), (47, 55721), (51, 55778), (54, 55853),

Gene: Fulcrum_79 Start: 55048, Stop: 55680, Start Num: 6

Candidate Starts for Fulcrum_79:

(Start: 6 @55048 has 35 MA's), (18, 55165), (30, 55261), (33, 55351), (39, 55405), (42, 55429), (44, 55453), (46, 55486), (47, 55489), (51, 55546), (54, 55621),

Gene: GOATification_79 Start: 55048, Stop: 55680, Start Num: 6

Candidate Starts for GOATification_79:

(Start: 6 @55048 has 35 MA's), (18, 55165), (30, 55261), (33, 55351), (39, 55405), (42, 55429), (44, 55453), (46, 55486), (47, 55489), (51, 55546), (54, 55621),

Gene: Genamy16_82 Start: 54039, Stop: 54671, Start Num: 6

Candidate Starts for Genamy16_82:

(Start: 6 @54039 has 35 MA's), (18, 54156), (19, 54162), (30, 54252), (33, 54342), (39, 54396), (42, 54420), (46, 54477), (51, 54537),

Gene: Gibbin_82 Start: 55853, Stop: 56485, Start Num: 6

Candidate Starts for Gibbin_82:

(Start: 6 @55853 has 35 MA's), (18, 55970), (30, 56066), (33, 56156), (39, 56210), (42, 56234), (46, 56291), (47, 56294), (51, 56351), (54, 56426),

Gene: Gretellyn_80 Start: 55682, Stop: 56314, Start Num: 6

Candidate Starts for Gretellyn_80:

(Start: 6 @55682 has 35 MA's), (16, 55775), (18, 55799), (30, 55895), (33, 55985), (39, 56039), (42, 56063), (46, 56120), (47, 56123), (51, 56180), (54, 56255),

Gene: Jalebi_79 Start: 56275, Stop: 56907, Start Num: 6

Candidate Starts for Jalebi_79:

(Start: 6 @56275 has 35 MA's), (18, 56392), (30, 56488), (33, 56578), (39, 56632), (42, 56656), (46, 56713), (47, 56716), (51, 56773),

Gene: Jamemuya19_77 Start: 53644, Stop: 54276, Start Num: 6

Candidate Starts for Jamemuya19_77:

(Start: 6 @53644 has 35 MA's), (18, 53761), (19, 53767), (30, 53857), (33, 53947), (39, 54001), (42, 54025), (46, 54082), (51, 54142),

Gene: Kudfre_54 Start: 37497, Stop: 37967, Start Num: 10

Candidate Starts for Kudfre_54:

(Start: 10 @37497 has 8 MA's), (11, 37503), (12, 37536), (15, 37554), (25, 37638), (28, 37671), (29, 37689), (32, 37716), (34, 37788), (35, 37791), (37, 37806), (41, 37836), (43, 37863), (45, 37875), (46, 37911), (49, 37953), (50, 37956),

Gene: Lambo_78 Start: 54845, Stop: 55477, Start Num: 6

Candidate Starts for Lambo_78:

(Start: 6 @54845 has 35 MA's), (18, 54962), (30, 55058), (33, 55148), (39, 55202), (42, 55226), (46, 55283), (47, 55286), (51, 55343), (54, 55418),

Gene: LavAbarElk_79 Start: 54481, Stop: 55113, Start Num: 6

Candidate Starts for LavAbarElk_79:

(Start: 6 @54481 has 35 MA's), (18, 54598), (30, 54694), (33, 54784), (39, 54838), (42, 54862), (44, 54886), (46, 54919), (47, 54922), (51, 54979), (54, 55054),

Gene: LilJank_54 Start: 38105, Stop: 38596, Start Num: 10

Candidate Starts for LilJank_54:

(1, 37868), (2, 38003), (3, 38045), (4, 38060), (5, 38078), (Start: 10 @38105 has 8 MA's), (12, 38144), (31, 38315), (33, 38402), (38, 38441), (43, 38483), (45, 38495), (48, 38564),

Gene: Lila22_80 Start: 55753, Stop: 56385, Start Num: 6

Candidate Starts for Lila22_80:

(Start: 6 @55753 has 35 MA's), (18, 55870), (30, 55966), (33, 56056), (39, 56110), (42, 56134), (46, 56191), (47, 56194), (51, 56251), (54, 56326),

Gene: LuckyLeo_76 Start: 54536, Stop: 55159, Start Num: 9

Candidate Starts for LuckyLeo_76:

(Start: 9 @54536 has 2 MA's), (18, 54644), (19, 54650), (32, 54764), (39, 54884), (42, 54908), (46, 54965), (54, 55100),

Gene: Mima20_78 Start: 55225, Stop: 55857, Start Num: 6

Candidate Starts for Mima20_78:

(Start: 6 @55225 has 35 MA's), (18, 55342), (30, 55438), (33, 55528), (39, 55582), (42, 55606), (46, 55663), (47, 55666), (51, 55723), (54, 55798),

Gene: MoiGyank_83 Start: 55829, Stop: 56461, Start Num: 6

Candidate Starts for MoiGyank_83:

(Start: 6 @55829 has 35 MA's), (18, 55946), (30, 56042), (33, 56132), (39, 56186), (42, 56210), (44, 56234), (46, 56267), (47, 56270), (51, 56327), (54, 56402),

Gene: Nettle_80 Start: 55583, Stop: 56215, Start Num: 6

Candidate Starts for Nettle_80:

(Start: 6 @55583 has 35 MA's), (18, 55700), (30, 55796), (33, 55886), (39, 55940), (42, 55964), (44, 55988), (46, 56021), (47, 56024), (51, 56081), (54, 56156),

Gene: Neville_55 Start: 37767, Stop: 38258, Start Num: 10

Candidate Starts for Neville_55:

(1, 37530), (2, 37665), (3, 37707), (4, 37722), (5, 37740), (Start: 10 @37767 has 8 MA's), (12, 37806), (31, 37977), (33, 38064), (38, 38103), (43, 38145), (45, 38157), (48, 38226),

Gene: NorManre_85 Start: 56582, Stop: 57211, Start Num: 6

Candidate Starts for NorManre_85:

(Start: 6 @56582 has 35 MA's), (18, 56699), (33, 56885), (39, 56939), (42, 56963), (46, 57020), (54, 57155),

Gene: NovaSharks_81 Start: 53742, Stop: 54374, Start Num: 6

Candidate Starts for NovaSharks_81:

(Start: 6 @53742 has 35 MA's), (18, 53859), (19, 53865), (30, 53955), (33, 54045), (39, 54099), (42, 54123), (46, 54180), (47, 54183), (51, 54240),

Gene: Octobien14_55 Start: 38073, Stop: 38543, Start Num: 10

Candidate Starts for Octobien14_55:

(Start: 10 @38073 has 8 MA's), (12, 38112), (17, 38160), (22, 38193), (24, 38205), (27, 38241), (34, 38364), (35, 38367), (37, 38382), (41, 38412), (43, 38439), (45, 38451), (46, 38487), (49, 38529), (50, 38532),

Gene: OtterstedtS21_80 Start: 55254, Stop: 55886, Start Num: 6

Candidate Starts for OtterstedtS21_80:

(Start: 6 @55254 has 35 MA's), (18, 55371), (30, 55467), (33, 55557), (39, 55611), (42, 55635), (46, 55692), (47, 55695), (51, 55752), (54, 55827),

Gene: ParvusTarda_78 Start: 54524, Stop: 55156, Start Num: 6

Candidate Starts for ParvusTarda_78:

(Start: 6 @54524 has 35 MA's), (18, 54641), (30, 54737), (33, 54827), (39, 54881), (42, 54905), (46, 54962), (47, 54965), (51, 55022), (54, 55097),

Gene: Patos_85 Start: 56581, Stop: 57210, Start Num: 6

Candidate Starts for Patos_85:

(Start: 6 @56581 has 35 MA's), (18, 56698), (33, 56884), (39, 56938), (42, 56962), (46, 57019), (54, 57154),

Gene: Pywacket_77 Start: 55666, Stop: 56298, Start Num: 6

Candidate Starts for Pywacket_77:

(Start: 6 @55666 has 35 MA's), (18, 55783), (30, 55879), (33, 55969), (39, 56023), (42, 56047), (46, 56104), (47, 56107), (51, 56164),

Gene: Rabbitrun_56 Start: 38290, Stop: 38781, Start Num: 10

Candidate Starts for Rabbitrun_56:

(Start: 10 @38290 has 8 MA's), (12, 38329), (21, 38419), (31, 38500), (32, 38521), (33, 38587), (41, 38641), (43, 38668),

Gene: Ranch_81 Start: 54341, Stop: 54973, Start Num: 6

Candidate Starts for Ranch_81:

(Start: 6 @54341 has 35 MA's), (18, 54458), (33, 54644), (39, 54698), (42, 54722), (46, 54779), (47, 54782), (51, 54839), (54, 54914),

Gene: RazorC_79 Start: 53784, Stop: 54416, Start Num: 6

Candidate Starts for RazorC_79:

(Start: 6 @53784 has 35 MA's), (18, 53901), (19, 53907), (30, 53997), (33, 54087), (39, 54141), (42, 54165), (46, 54222), (47, 54225), (51, 54282),

Gene: Riduram_78 Start: 53359, Stop: 53991, Start Num: 6

Candidate Starts for Riduram_78:

(Start: 6 @53359 has 35 MA's), (18, 53476), (19, 53482), (30, 53572), (33, 53662), (39, 53716), (42, 53740), (46, 53797), (47, 53800), (51, 53857),

Gene: Rota_77 Start: 55374, Stop: 56006, Start Num: 6

Candidate Starts for Rota_77:

(Start: 6 @55374 has 35 MA's), (18, 55491), (30, 55587), (33, 55677), (39, 55731), (42, 55755), (46, 55812), (47, 55815), (51, 55872), (54, 55947),

Gene: Rukungu_81 Start: 55962, Stop: 56594, Start Num: 6

Candidate Starts for Rukungu_81:

(Start: 6 @55962 has 35 MA's), (18, 56079), (30, 56175), (33, 56265), (39, 56319), (42, 56343), (46, 56400), (47, 56403), (51, 56460),

Gene: Rumi_80 Start: 53327, Stop: 53959, Start Num: 6

Candidate Starts for Rumi_80:

(Start: 6 @53327 has 35 MA's), (18, 53444), (19, 53450), (30, 53540), (33, 53630), (39, 53684), (42, 53708), (46, 53765), (47, 53768), (51, 53825),

Gene: Sadboi_80 Start: 55683, Stop: 56315, Start Num: 6

Candidate Starts for Sadboi_80:

(Start: 6 @55683 has 35 MA's), (16, 55776), (18, 55800), (30, 55896), (33, 55986), (39, 56040), (42, 56064), (46, 56121), (47, 56124), (51, 56181), (54, 56256),

Gene: Sampudon_81 Start: 56275, Stop: 56907, Start Num: 6

Candidate Starts for Sampudon_81:

(Start: 6 @56275 has 35 MA's), (18, 56392), (30, 56488), (33, 56578), (39, 56632), (42, 56656), (46, 56713), (47, 56716), (51, 56773),

Gene: Sephiroth_53 Start: 37666, Stop: 38136, Start Num: 10

Candidate Starts for Sephiroth_53:

(Start: 10 @37666 has 8 MA's), (12, 37705), (15, 37723), (20, 37777), (22, 37786), (24, 37798), (34, 37957), (35, 37960), (37, 37975), (41, 38005), (43, 38032), (45, 38044), (46, 38080), (49, 38122), (50, 38125),

Gene: Stormer_79 Start: 53331, Stop: 53963, Start Num: 6

Candidate Starts for Stormer_79:

(Start: 6 @53331 has 35 MA's), (18, 53448), (19, 53454), (30, 53544), (33, 53634), (39, 53688), (42, 53712), (46, 53769), (47, 53772), (51, 53829),

Gene: Syleon_55 Start: 37590, Stop: 38060, Start Num: 10

Candidate Starts for Syleon_55:

(Start: 10 @37590 has 8 MA's), (11, 37596), (12, 37629), (15, 37647), (25, 37731), (28, 37764), (29, 37782), (32, 37809), (34, 37881), (35, 37884), (37, 37899), (41, 37929), (43, 37956), (45, 37968), (46, 38004), (49, 38046), (50, 38049),

Gene: Tillicus_73 Start: 54485, Stop: 55114, Start Num: 7

Candidate Starts for Tillicus_73:

(Start: 7 @54485 has 1 MA's), (18, 54599), (30, 54695), (32, 54719), (33, 54785), (39, 54839), (42, 54863), (46, 54920), (51, 54980), (52, 54986), (54, 55055),

Gene: Trax_54 Start: 38052, Stop: 38543, Start Num: 10

Candidate Starts for Trax_54:

(1, 37815), (2, 37950), (3, 37992), (4, 38007), (5, 38025), (Start: 10 @38052 has 8 MA's), (12, 38091), (31, 38262), (33, 38349), (38, 38388), (43, 38430), (45, 38442), (48, 38511),

Gene: Wojtek_73 Start: 55365, Stop: 55994, Start Num: 6

Candidate Starts for Wojtek_73:

(Start: 6 @55365 has 35 MA's), (16, 55458), (18, 55482), (19, 55488), (26, 55548), (33, 55668), (39, 55722), (42, 55746), (46, 55803), (53, 55929), (54, 55938),

Gene: Xenia2_81 Start: 55179, Stop: 55835, Start Num: 8

Candidate Starts for Xenia2_81:

(Start: 8 @55179 has 2 MA's), (13, 55233), (14, 55236), (18, 55290), (19, 55296), (23, 55314), (33, 55476), (36, 55491), (41, 55542), (42, 55554), (46, 55611), (51, 55671), (55, 55794),

Gene: Yikes_81 Start: 56129, Stop: 56761, Start Num: 6

Candidate Starts for Yikes_81:

(Start: 6 @56129 has 35 MA's), (18, 56246), (30, 56342), (33, 56432), (39, 56486), (42, 56510), (46, 56567), (47, 56570), (51, 56627), (54, 56702),

Gene: Zany_77 Start: 55582, Stop: 56214, Start Num: 6

Candidate Starts for Zany_77:

(Start: 6 @55582 has 35 MA's), (18, 55699), (30, 55795), (33, 55885), (39, 55939), (42, 55963), (46, 56020), (47, 56023), (51, 56080),