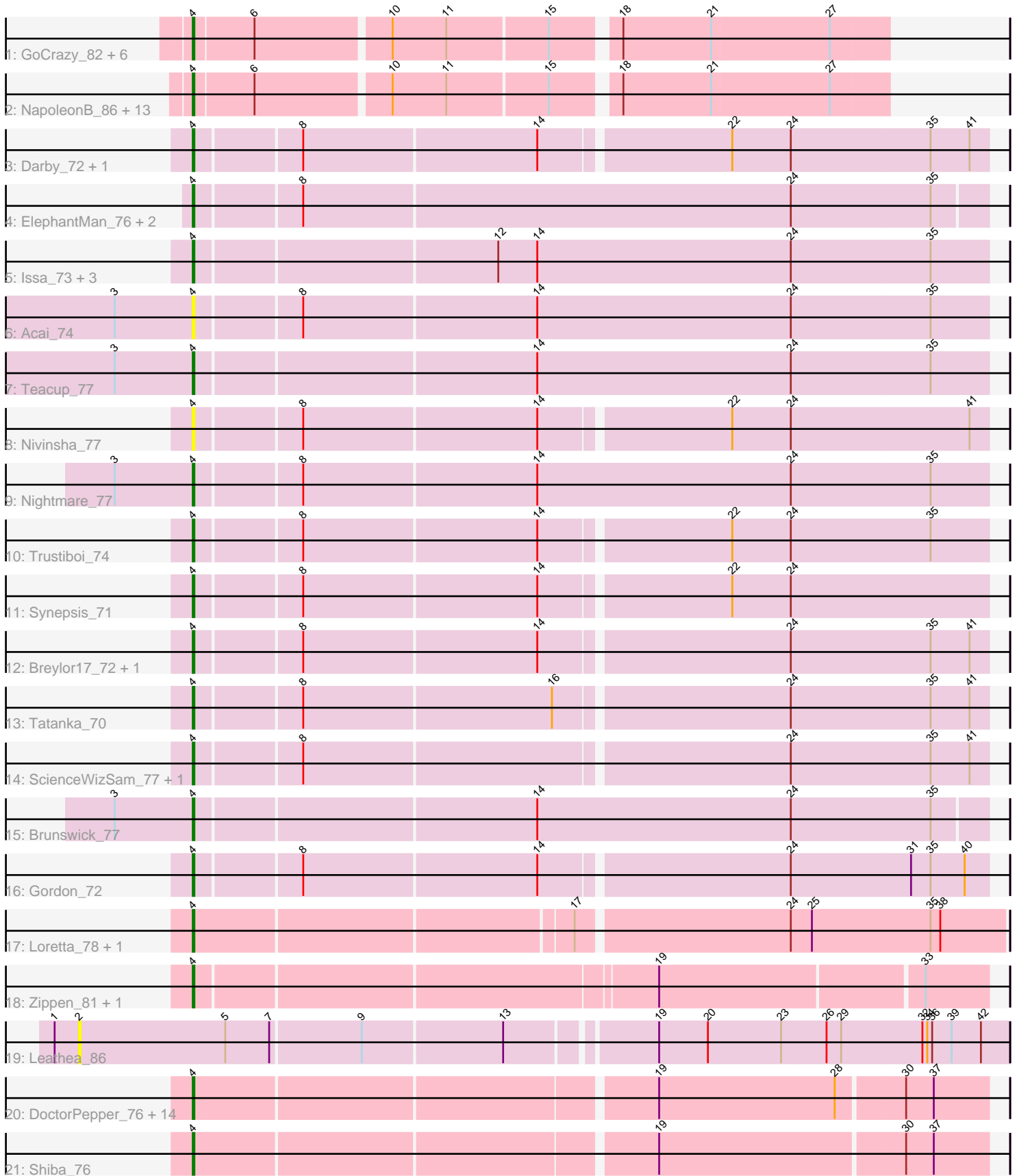


# Pham 216157



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 216157 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216157 has 64 members, 12 are drafts.

Phages represented in each track:

- Track 1 : GoCrazy\_82, Xenomorph\_80, BenitoAntonio\_85, Benllo\_85, Cheesy\_86, KeaneyLin\_82, Bowling\_86
- Track 2 : NapoleonB\_86, Heisenberger\_84, Elsa\_85, Correa\_83, Tribby\_87, Mooshroom\_86, Arcadia\_85, Hankly\_85, JEGGS\_84, Mudcat\_81, Circum\_85, Kardesai\_85, Nason\_85, Dynamite\_85
- Track 3 : Darby\_72, AreFloNak\_80
- Track 4 : ElephantMan\_76, Niktson\_76, LucySwiss\_75
- Track 5 : Issa\_73, CapnMurica\_72, MiniBagel\_76, Tenno\_75
- Track 6 : Acai\_74
- Track 7 : Teacup\_77
- Track 8 : Nivinsha\_77
- Track 9 : Nightmare\_77
- Track 10 : Trustiboi\_74
- Track 11 : Synopsis\_71
- Track 12 : Breylor17\_72, DevitoJr\_75
- Track 13 : Tatanka\_70
- Track 14 : ScienceWizSam\_77, CastorTray\_78
- Track 15 : Brunswick\_77
- Track 16 : Gordon\_72
- Track 17 : Loretta\_78, Ingrid\_82
- Track 18 : Zippen\_81, Inked\_82
- Track 19 : Leathea\_86
- Track 20 : DoctorPepper\_76, MrAaronian\_77, HerbBucket\_76, Linda\_77, Djungelskog\_76, Salk\_77, Egad\_77, Raunak\_78, Sloopyjoe\_77, BronxBay\_77, Boog\_78, ProfFrink\_77, StarLord\_77, Michelle\_77, Stayer\_77
- Track 21 : Shiba\_76

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

The start number called the most often in the published annotations is 4, it was called in 52 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai\_74, Arcadia\_85, AreFloNak\_80, BenitoAntonio\_85, Benllo\_85, Boog\_78, Bowling\_86, Breylor17\_72, BronxBay\_77, Brunswick\_77, CapnMurica\_72, CastorTray\_78, Cheesy\_86, Circum\_85, Correa\_83, Darby\_72, DevitoJr\_75, Djungelskog\_76, DoctorPepper\_76, Dynamite\_85, Egad\_77, ElephantMan\_76, Elsa\_85, GoCrazy\_82, Gordon\_72, Hankly\_85, Heisenberger\_84, HerbBucket\_76, Ingrid\_82, Inked\_82, Issa\_73, JEGGS\_84, Kardesai\_85, KeaneyLin\_82, Linda\_77, Loretta\_78, LucySwiss\_75, Michelle\_77, MiniBagel\_76, Mooshroom\_86, MrAaronian\_77, Mudcat\_81, NapoleonB\_86, Nason\_85, Nightmare\_77, Niktson\_76, Nivinsha\_77, ProfFrink\_77, Raunak\_78, Salk\_77, ScienceWizSam\_77, Shiba\_76, Sloopyjoe\_77, StarLord\_77, Stayer\_77, Synepsis\_71, Tatanka\_70, Teacup\_77, Tenno\_75, Tribby\_87, Trustiboi\_74, Xenomorph\_80, Zippen\_81,

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

- 

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

- Leathea\_86,

### Summary by start number:

Start 2:

- Found in 1 of 64 ( 1.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Leathea\_86 (AU6),

Start 4:

- Found in 63 of 64 ( 98.4% ) of genes in pham
- Manual Annotations of this start: 52 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acai\_74 (AU1), Arcadia\_85 (AM), AreFloNak\_80 (AU1), BenitoAntonio\_85 (AM), Benllo\_85 (AM), Boog\_78 (AW), Bowling\_86 (AM), Breylor17\_72 (AU1), BronxBay\_77 (AW), Brunswick\_77 (AU1), CapnMurica\_72 (AU1), CastorTray\_78 (AU1), Cheesy\_86 (AM), Circum\_85 (AM), Correa\_83 (AM), Darby\_72 (AU1), DevitoJr\_75 (AU1), Djungelskog\_76 (AW), DoctorPepper\_76 (AW), Dynamite\_85 (AM), Egad\_77 (AW), ElephantMan\_76 (AU1), Elsa\_85 (AM), GoCrazy\_82 (AM), Gordon\_72 (AU1), Hankly\_85 (AM), Heisenberger\_84 (AM), HerbBucket\_76 (AW), Ingrid\_82 (AU3), Inked\_82 (AU), Issa\_73 (AU1), JEGGS\_84 (AM), Kardesai\_85 (AM), KeaneyLin\_82 (AM), Linda\_77 (AW), Loretta\_78 (AU3), LucySwiss\_75 (AU1), Michelle\_77 (AW), MiniBagel\_76 (AU1), Mooshroom\_86 (AM), MrAaronian\_77 (AW), Mudcat\_81 (AM), NapoleonB\_86 (AM), Nason\_85 (AM), Nightmare\_77 (AU1), Niktson\_76 (AU1), Nivinsha\_77 (AU1), ProfFrink\_77 (AW), Raunak\_78 (AW), Salk\_77 (AW), ScienceWizSam\_77 (AU1), Shiba\_76 (AW), Sloopyjoe\_77 (AW), StarLord\_77 (AW), Stayer\_77 (AW), Synepsis\_71 (AU1), Tatanka\_70 (AU1), Teacup\_77 (AU1), Tenno\_75 (AU1), Tribby\_87 (AM), Trustiboi\_74 (AU1), Xenomorph\_80 (AM), Zippen\_81 (AU3),

### Summary by clusters:

There are 6 clusters represented in this pham: AM, AU1, AU3, AU, AW, AU6,

Info for manual annotations of cluster AM:

- Start number 4 was manually annotated 19 times for cluster AM.

Info for manual annotations of cluster AU:

- Start number 4 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 4 was manually annotated 17 times for cluster AU1.

Info for manual annotations of cluster AU3:

- Start number 4 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AW:

- Start number 4 was manually annotated 13 times for cluster AW.

### **Gene Information:**

Gene: Acai\_74 Start: 50191, Stop: 50667, Start Num: 4

Candidate Starts for Acai\_74:

(3, 50143), (Start: 4 @50191 has 52 MA's), (8, 50251), (14, 50392), (24, 50548), (35, 50632),

Gene: Arcadia\_85 Start: 50574, Stop: 50978, Start Num: 4

Candidate Starts for Arcadia\_85:

(Start: 4 @50574 has 52 MA's), (6, 50610), (10, 50688), (11, 50721), (15, 50781), (18, 50817), (21, 50871), (27, 50943),

Gene: AreFloNak\_80 Start: 50058, Stop: 50525, Start Num: 4

Candidate Starts for AreFloNak\_80:

(Start: 4 @50058 has 52 MA's), (8, 50118), (14, 50259), (22, 50370), (24, 50406), (35, 50490), (41, 50514),

Gene: BenitoAntonio\_85 Start: 50151, Stop: 50555, Start Num: 4

Candidate Starts for BenitoAntonio\_85:

(Start: 4 @50151 has 52 MA's), (6, 50187), (10, 50265), (11, 50298), (15, 50358), (18, 50394), (21, 50448), (27, 50520),

Gene: Benllo\_85 Start: 50469, Stop: 50873, Start Num: 4

Candidate Starts for Benllo\_85:

(Start: 4 @50469 has 52 MA's), (6, 50505), (10, 50583), (11, 50616), (15, 50676), (18, 50712), (21, 50766), (27, 50838),

Gene: Boog\_78 Start: 47985, Stop: 48449, Start Num: 4

Candidate Starts for Boog\_78:

(Start: 4 @47985 has 52 MA's), (19, 48255), (28, 48363), (30, 48402), (37, 48417),

Gene: Bowling\_86 Start: 50927, Stop: 51331, Start Num: 4

Candidate Starts for Bowling\_86:

(Start: 4 @50927 has 52 MA's), (6, 50963), (10, 51041), (11, 51074), (15, 51134), (18, 51170), (21, 51224), (27, 51296),

Gene: Breylor17\_72 Start: 50448, Stop: 50915, Start Num: 4

Candidate Starts for Breylor17\_72:

(Start: 4 @50448 has 52 MA's), (8, 50508), (14, 50649), (24, 50796), (35, 50880), (41, 50904),

Gene: BronxBay\_77 Start: 48274, Stop: 48738, Start Num: 4

Candidate Starts for BronxBay\_77:

(Start: 4 @48274 has 52 MA's), (19, 48544), (28, 48652), (30, 48691), (37, 48706),

Gene: Brunswick\_77 Start: 50186, Stop: 50659, Start Num: 4

Candidate Starts for Brunswick\_77:

(3, 50138), (Start: 4 @50186 has 52 MA's), (14, 50387), (24, 50543), (35, 50627),

Gene: CapnMurica\_72 Start: 50515, Stop: 50991, Start Num: 4

Candidate Starts for CapnMurica\_72:

(Start: 4 @50515 has 52 MA's), (12, 50692), (14, 50716), (24, 50872), (35, 50956),

Gene: CastorTray\_78 Start: 50576, Stop: 51043, Start Num: 4

Candidate Starts for CastorTray\_78:

(Start: 4 @50576 has 52 MA's), (8, 50636), (24, 50924), (35, 51008), (41, 51032),

Gene: Cheesy\_86 Start: 50366, Stop: 50770, Start Num: 4

Candidate Starts for Cheesy\_86:

(Start: 4 @50366 has 52 MA's), (6, 50402), (10, 50480), (11, 50513), (15, 50573), (18, 50609), (21, 50663), (27, 50735),

Gene: Circum\_85 Start: 50423, Stop: 50827, Start Num: 4

Candidate Starts for Circum\_85:

(Start: 4 @50423 has 52 MA's), (6, 50459), (10, 50537), (11, 50570), (15, 50630), (18, 50666), (21, 50720), (27, 50792),

Gene: Correa\_83 Start: 49923, Stop: 50327, Start Num: 4

Candidate Starts for Correa\_83:

(Start: 4 @49923 has 52 MA's), (6, 49959), (10, 50037), (11, 50070), (15, 50130), (18, 50166), (21, 50220), (27, 50292),

Gene: Darby\_72 Start: 49622, Stop: 50089, Start Num: 4

Candidate Starts for Darby\_72:

(Start: 4 @49622 has 52 MA's), (8, 49682), (14, 49823), (22, 49934), (24, 49970), (35, 50054), (41, 50078),

Gene: DevitoJr\_75 Start: 50004, Stop: 50471, Start Num: 4

Candidate Starts for DevitoJr\_75:

(Start: 4 @50004 has 52 MA's), (8, 50064), (14, 50205), (24, 50352), (35, 50436), (41, 50460),

Gene: Djungelskog\_76 Start: 48276, Stop: 48740, Start Num: 4

Candidate Starts for Djungelskog\_76:

(Start: 4 @48276 has 52 MA's), (19, 48546), (28, 48654), (30, 48693), (37, 48708),

Gene: DoctorPepper\_76 Start: 47969, Stop: 48433, Start Num: 4

Candidate Starts for DoctorPepper\_76:

(Start: 4 @47969 has 52 MA's), (19, 48239), (28, 48347), (30, 48386), (37, 48401),

Gene: Dynamite\_85 Start: 49942, Stop: 50346, Start Num: 4

Candidate Starts for Dynamite\_85:

(Start: 4 @49942 has 52 MA's), (6, 49978), (10, 50056), (11, 50089), (15, 50149), (18, 50185), (21, 50239), (27, 50311),

Gene: Egad\_77 Start: 48243, Stop: 48707, Start Num: 4

Candidate Starts for Egad\_77:

(Start: 4 @48243 has 52 MA's), (19, 48513), (28, 48621), (30, 48660), (37, 48675),

Gene: ElephantMan\_76 Start: 50779, Stop: 51252, Start Num: 4

Candidate Starts for ElephantMan\_76:

(Start: 4 @50779 has 52 MA's), (8, 50839), (24, 51136), (35, 51220),

Gene: Elsa\_85 Start: 50574, Stop: 50978, Start Num: 4

Candidate Starts for Elsa\_85:

(Start: 4 @50574 has 52 MA's), (6, 50610), (10, 50688), (11, 50721), (15, 50781), (18, 50817), (21, 50871), (27, 50943),

Gene: GoCrazy\_82 Start: 49202, Stop: 49606, Start Num: 4

Candidate Starts for GoCrazy\_82:

(Start: 4 @49202 has 52 MA's), (6, 49238), (10, 49316), (11, 49349), (15, 49409), (18, 49445), (21, 49499), (27, 49571),

Gene: Gordon\_72 Start: 50418, Stop: 50885, Start Num: 4

Candidate Starts for Gordon\_72:

(Start: 4 @50418 has 52 MA's), (8, 50478), (14, 50619), (24, 50766), (31, 50838), (35, 50850), (40, 50871),

Gene: Hankly\_85 Start: 49580, Stop: 49984, Start Num: 4

Candidate Starts for Hankly\_85:

(Start: 4 @49580 has 52 MA's), (6, 49616), (10, 49694), (11, 49727), (15, 49787), (18, 49823), (21, 49877), (27, 49949),

Gene: Heisenberger\_84 Start: 49831, Stop: 50235, Start Num: 4

Candidate Starts for Heisenberger\_84:

(Start: 4 @49831 has 52 MA's), (6, 49867), (10, 49945), (11, 49978), (15, 50038), (18, 50074), (21, 50128), (27, 50200),

Gene: HerbBucket\_76 Start: 47969, Stop: 48433, Start Num: 4

Candidate Starts for HerbBucket\_76:

(Start: 4 @47969 has 52 MA's), (19, 48239), (28, 48347), (30, 48386), (37, 48401),

Gene: Ingrid\_82 Start: 50381, Stop: 50857, Start Num: 4

Candidate Starts for Ingrid\_82:

(Start: 4 @50381 has 52 MA's), (17, 50603), (24, 50729), (25, 50741), (35, 50813), (38, 50819),

Gene: Inked\_82 Start: 51097, Stop: 51561, Start Num: 4

Candidate Starts for Inked\_82:

(Start: 4 @51097 has 52 MA's), (19, 51367), (33, 51523),

Gene: Issa\_73 Start: 49586, Stop: 50062, Start Num: 4

Candidate Starts for Issa\_73:

(Start: 4 @49586 has 52 MA's), (12, 49763), (14, 49787), (24, 49943), (35, 50027),

Gene: JEGGS\_84 Start: 49910, Stop: 50314, Start Num: 4

Candidate Starts for JEGGS\_84:

(Start: 4 @49910 has 52 MA's), (6, 49946), (10, 50024), (11, 50057), (15, 50117), (18, 50153), (21, 50207), (27, 50279),

Gene: Kardesai\_85 Start: 49517, Stop: 49921, Start Num: 4

Candidate Starts for Kardesai\_85:

(Start: 4 @49517 has 52 MA's), (6, 49553), (10, 49631), (11, 49664), (15, 49724), (18, 49760), (21, 49814), (27, 49886),

Gene: KeaneyLin\_82 Start: 49645, Stop: 50049, Start Num: 4

Candidate Starts for KeaneyLin\_82:

(Start: 4 @49645 has 52 MA's), (6, 49681), (10, 49759), (11, 49792), (15, 49852), (18, 49888), (21, 49942), (27, 50014),

Gene: Leathea\_86 Start: 48939, Stop: 49490, Start Num: 2

Candidate Starts for Leathea\_86:

(1, 48924), (2, 48939), (5, 49029), (7, 49056), (9, 49110), (13, 49194), (19, 49278), (20, 49308), (23, 49353), (26, 49380), (29, 49389), (32, 49437), (34, 49440), (36, 49443), (39, 49455), (42, 49473),

Gene: Linda\_77 Start: 48256, Stop: 48720, Start Num: 4

Candidate Starts for Linda\_77:

(Start: 4 @48256 has 52 MA's), (19, 48526), (28, 48634), (30, 48673), (37, 48688),

Gene: Loretta\_78 Start: 50381, Stop: 50857, Start Num: 4

Candidate Starts for Loretta\_78:

(Start: 4 @50381 has 52 MA's), (17, 50603), (24, 50729), (25, 50741), (35, 50813), (38, 50819),

Gene: LucySwiss\_75 Start: 49844, Stop: 50320, Start Num: 4

Candidate Starts for LucySwiss\_75:

(Start: 4 @49844 has 52 MA's), (8, 49904), (24, 50201), (35, 50285),

Gene: Michelle\_77 Start: 48273, Stop: 48737, Start Num: 4

Candidate Starts for Michelle\_77:

(Start: 4 @48273 has 52 MA's), (19, 48543), (28, 48651), (30, 48690), (37, 48705),

Gene: MiniBagel\_76 Start: 50519, Stop: 50995, Start Num: 4

Candidate Starts for MiniBagel\_76:

(Start: 4 @50519 has 52 MA's), (12, 50696), (14, 50720), (24, 50876), (35, 50960),

Gene: Mooshroom\_86 Start: 49517, Stop: 49921, Start Num: 4

Candidate Starts for Mooshroom\_86:

(Start: 4 @49517 has 52 MA's), (6, 49553), (10, 49631), (11, 49664), (15, 49724), (18, 49760), (21, 49814), (27, 49886),

Gene: MrAaronian\_77 Start: 48273, Stop: 48737, Start Num: 4

Candidate Starts for MrAaronian\_77:

(Start: 4 @48273 has 52 MA's), (19, 48543), (28, 48651), (30, 48690), (37, 48705),

Gene: Mudcat\_81 Start: 51268, Stop: 51672, Start Num: 4

Candidate Starts for Mudcat\_81:

(Start: 4 @51268 has 52 MA's), (6, 51304), (10, 51382), (11, 51415), (15, 51475), (18, 51511), (21, 51565), (27, 51637),

Gene: NapoleonB\_86 Start: 49942, Stop: 50346, Start Num: 4  
Candidate Starts for NapoleonB\_86:  
(Start: 4 @49942 has 52 MA's), (6, 49978), (10, 50056), (11, 50089), (15, 50149), (18, 50185), (21, 50239), (27, 50311),

Gene: Nason\_85 Start: 50574, Stop: 50978, Start Num: 4  
Candidate Starts for Nason\_85:  
(Start: 4 @50574 has 52 MA's), (6, 50610), (10, 50688), (11, 50721), (15, 50781), (18, 50817), (21, 50871), (27, 50943),

Gene: Nightmare\_77 Start: 50946, Stop: 51422, Start Num: 4  
Candidate Starts for Nightmare\_77:  
(3, 50898), (Start: 4 @50946 has 52 MA's), (8, 51006), (14, 51147), (24, 51303), (35, 51387),

Gene: Niktson\_76 Start: 50779, Stop: 51252, Start Num: 4  
Candidate Starts for Niktson\_76:  
(Start: 4 @50779 has 52 MA's), (8, 50839), (24, 51136), (35, 51220),

Gene: Nivinsha\_77 Start: 50059, Stop: 50526, Start Num: 4  
Candidate Starts for Nivinsha\_77:  
(Start: 4 @50059 has 52 MA's), (8, 50119), (14, 50260), (22, 50371), (24, 50407), (41, 50515),

Gene: ProfFrink\_77 Start: 48242, Stop: 48706, Start Num: 4  
Candidate Starts for ProfFrink\_77:  
(Start: 4 @48242 has 52 MA's), (19, 48512), (28, 48620), (30, 48659), (37, 48674),

Gene: Raunak\_78 Start: 47952, Stop: 48416, Start Num: 4  
Candidate Starts for Raunak\_78:  
(Start: 4 @47952 has 52 MA's), (19, 48222), (28, 48330), (30, 48369), (37, 48384),

Gene: Salk\_77 Start: 48256, Stop: 48720, Start Num: 4  
Candidate Starts for Salk\_77:  
(Start: 4 @48256 has 52 MA's), (19, 48526), (28, 48634), (30, 48673), (37, 48688),

Gene: ScienceWizSam\_77 Start: 50177, Stop: 50644, Start Num: 4  
Candidate Starts for ScienceWizSam\_77:  
(Start: 4 @50177 has 52 MA's), (8, 50237), (24, 50525), (35, 50609), (41, 50633),

Gene: Shiba\_76 Start: 47968, Stop: 48432, Start Num: 4  
Candidate Starts for Shiba\_76:  
(Start: 4 @47968 has 52 MA's), (19, 48238), (30, 48385), (37, 48400),

Gene: Sloopyjoe\_77 Start: 48275, Stop: 48739, Start Num: 4  
Candidate Starts for Sloopyjoe\_77:  
(Start: 4 @48275 has 52 MA's), (19, 48545), (28, 48653), (30, 48692), (37, 48707),

Gene: StarLord\_77 Start: 48268, Stop: 48732, Start Num: 4  
Candidate Starts for StarLord\_77:  
(Start: 4 @48268 has 52 MA's), (19, 48538), (28, 48646), (30, 48685), (37, 48700),

Gene: Stayer\_77 Start: 48271, Stop: 48735, Start Num: 4  
Candidate Starts for Stayer\_77:  
(Start: 4 @48271 has 52 MA's), (19, 48541), (28, 48649), (30, 48688), (37, 48703),



Gene: Synepsis\_71 Start: 49985, Stop: 50452, Start Num: 4

Candidate Starts for Synepsis\_71:

(Start: 4 @49985 has 52 MA's), (8, 50045), (14, 50186), (22, 50297), (24, 50333),

Gene: Tatanka\_70 Start: 50163, Stop: 50630, Start Num: 4

Candidate Starts for Tatanka\_70:

(Start: 4 @50163 has 52 MA's), (8, 50223), (16, 50373), (24, 50511), (35, 50595), (41, 50619),

Gene: Teacup\_77 Start: 50837, Stop: 51313, Start Num: 4

Candidate Starts for Teacup\_77:

(3, 50789), (Start: 4 @50837 has 52 MA's), (14, 51038), (24, 51194), (35, 51278),

Gene: Tenno\_75 Start: 50552, Stop: 51028, Start Num: 4

Candidate Starts for Tenno\_75:

(Start: 4 @50552 has 52 MA's), (12, 50729), (14, 50753), (24, 50909), (35, 50993),

Gene: Tribby\_87 Start: 50701, Stop: 51105, Start Num: 4

Candidate Starts for Tribby\_87:

(Start: 4 @50701 has 52 MA's), (6, 50737), (10, 50815), (11, 50848), (15, 50908), (18, 50944), (21, 50998), (27, 51070),

Gene: Trustiboi\_74 Start: 50266, Stop: 50733, Start Num: 4

Candidate Starts for Trustiboi\_74:

(Start: 4 @50266 has 52 MA's), (8, 50326), (14, 50467), (22, 50578), (24, 50614), (35, 50698),

Gene: Xenomorph\_80 Start: 50228, Stop: 50632, Start Num: 4

Candidate Starts for Xenomorph\_80:

(Start: 4 @50228 has 52 MA's), (6, 50264), (10, 50342), (11, 50375), (15, 50435), (18, 50471), (21, 50525), (27, 50597),

Gene: Zippen\_81 Start: 50971, Stop: 51435, Start Num: 4

Candidate Starts for Zippen\_81:

(Start: 4 @50971 has 52 MA's), (19, 51241), (33, 51397),