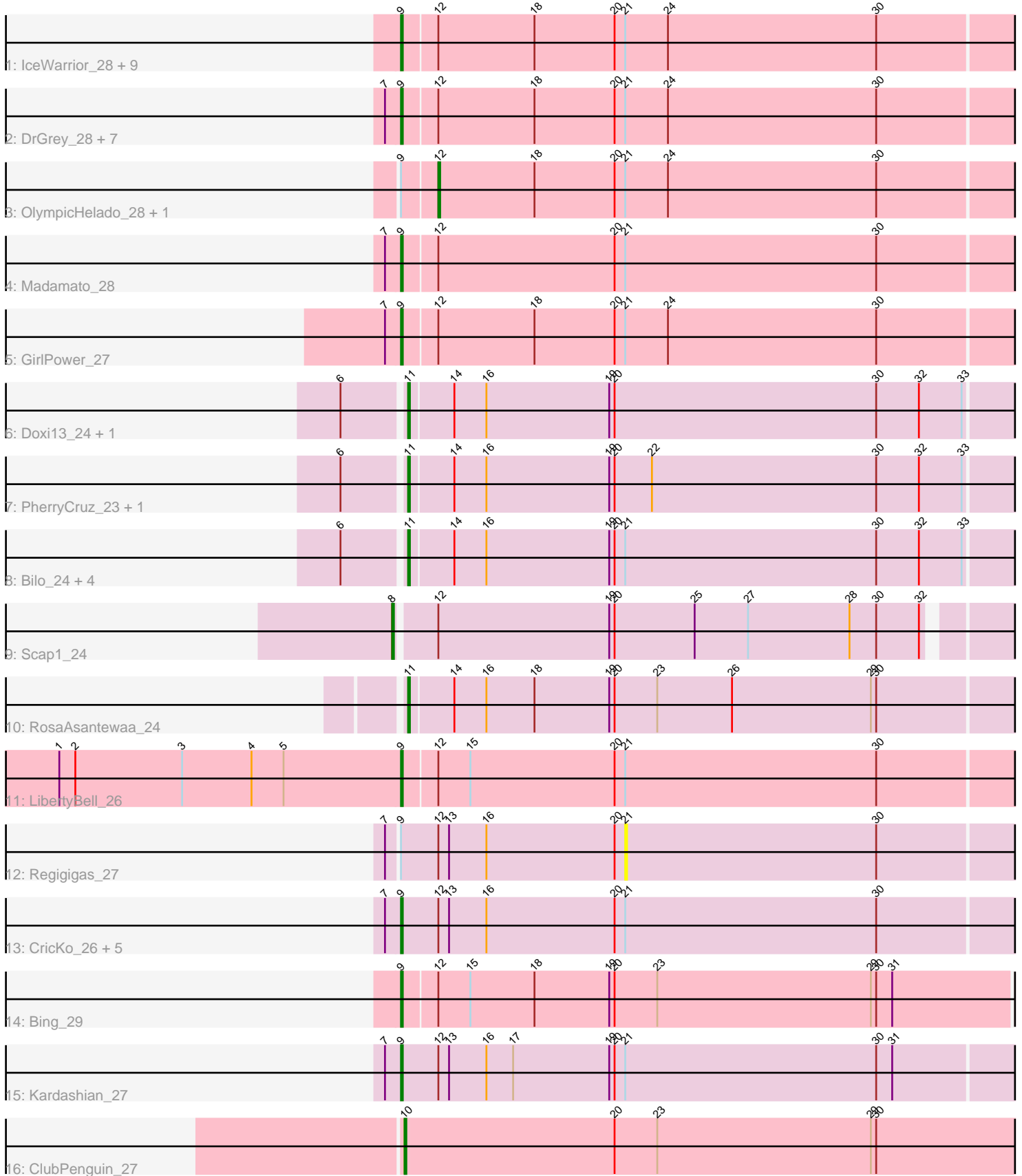


# Pham 171575



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 171575 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171575 has 44 members, 2 are drafts.

Phages represented in each track:

- Track 1 : IceWarrior\_28, TieDye\_27, Hoshi\_28, CherryBlossom\_28, Indigenous\_28, TaidaOne\_28, Rima\_28, Esketit\_28, TonyStarch\_28, Namu\_28
- Track 2 : DrGrey\_28, FidgetOrca\_28, Popy\_28, Soshi\_28, Jaylociraptor\_28, Maya\_28, Meibysrarus\_28, FrodoSwaggins\_28
- Track 3 : OlympicHelado\_28, Spectropatronm\_28
- Track 4 : Madamato\_28
- Track 5 : GirlPower\_27
- Track 6 : Doxi13\_24, GoblinVoyage\_24
- Track 7 : PherryCruz\_23, RavenPuff\_23
- Track 8 : Bilo\_24, Annihilus\_24, HotFries\_23, SheRa\_24, Moozy\_24
- Track 9 : Scap1\_24
- Track 10 : RosaAsantewaa\_24
- Track 11 : LibertyBell\_26
- Track 12 : Regigigas\_27
- Track 13 : CricKo\_26, Miek\_26, FromIndy\_27, Rainydai\_26, Thiqqums\_26, SendItCS\_25
- Track 14 : Bing\_29
- Track 15 : Kardashian\_27
- Track 16 : ClubPenguin\_27

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

The start number called the most often in the published annotations is 9, it was called in 28 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bing\_29, CherryBlossom\_28, CricKo\_26, DrGrey\_28, Esketit\_28, FidgetOrca\_28, FrodoSwaggins\_28, FromIndy\_27, GirlPower\_27, Hoshi\_28, IceWarrior\_28, Indigenous\_28, Jaylociraptor\_28, Kardashian\_27, LibertyBell\_26, Madamato\_28, Maya\_28, Meibysrarus\_28, Miek\_26, Namu\_28, Popy\_28, Rainydai\_26, Rima\_28, SendItCS\_25, Soshi\_28, TaidaOne\_28, Thiqqums\_26, TieDye\_27, TonyStarch\_28,

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

- OlympicHelado\_28, Regigigas\_27, Spectropatronm\_28,

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

- Annihilus\_24, Bilo\_24, ClubPenguin\_27, Doxi13\_24, GoblinVoyage\_24, HotFries\_23, Moozy\_24, PherryCruz\_23, RavenPuff\_23, RosaAsantewaa\_24, Scap1\_24, SheRa\_24,

### Summary by start number:

Start 8:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Scap1\_24 (BI2),

Start 9:

- Found in 32 of 44 ( 72.7% ) of genes in pham
- Manual Annotations of this start: 28 of 42
- Called 90.6% of time when present
- Phage (with cluster) where this start called: Bing\_29 (BI5), CherryBlossom\_28 (BI1), CricKo\_26 (BI4), DrGrey\_28 (BI1), Esketit\_28 (BI1), FidgetOrca\_28 (BI1), FrodoSwaggins\_28 (BI1), FromIndy\_27 (BI4), GirlPower\_27 (BI1), Hoshi\_28 (BI1), IceWarrior\_28 (BI1), Indigenous\_28 (BI1), Jaylociraptor\_28 (BI1), Kardashian\_27 (BI6), LibertyBell\_26 (BI3), Madamato\_28 (BI1), Maya\_28 (BI1), Meibysrarus\_28 (BI1), Miek\_26 (BI4), Namu\_28 (BI1), Popy\_28 (BI1), Rainydai\_26 (BI4), Rima\_28 (BI1), SendItCS\_25 (BI4), Soshi\_28 (BI1), TaidaOne\_28 (BI1), Thiqqums\_26 (BI4), TieDye\_27 (BI1), TonyStarch\_28 (BI1),

Start 10:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ClubPenguin\_27 (BI7),

Start 11:

- Found in 10 of 44 ( 22.7% ) of genes in pham
- Manual Annotations of this start: 10 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annihilus\_24 (BI2), Bilo\_24 (BI2), Doxi13\_24 (BI2), GoblinVoyage\_24 (BI2), HotFries\_23 (BI2), Moozy\_24 (BI2), PherryCruz\_23 (BI2), RavenPuff\_23 (BI2), RosaAsantewaa\_24 (BI2), SheRa\_24 (BI2),

Start 12:

- Found in 33 of 44 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 6.1% of time when present
- Phage (with cluster) where this start called: OlympicHelado\_28 (BI1), Spectropatronm\_28 (BI1),

Start 21:

- Found in 36 of 44 ( 81.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 2.8% of time when present

- Phage (with cluster) where this start called: Regigigas\_27 (BI4),

### **Summary by clusters:**

There are 7 clusters represented in this pham: BI6, BI7, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster BI1:

- Start number 9 was manually annotated 20 times for cluster BI1.
- Start number 12 was manually annotated 2 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 8 was manually annotated 1 time for cluster BI2.
- Start number 11 was manually annotated 10 times for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 9 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 9 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 9 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 9 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 10 was manually annotated 1 time for cluster BI7.

### **Gene Information:**

Gene: Annihilus\_24 Start: 21982, Stop: 22377, Start Num: 11

Candidate Starts for Annihilus\_24:

(6, 21949), (Start: 11 @21982 has 10 MA's), (14, 22006), (16, 22024), (19, 22093), (20, 22096), (21, 22102), (30, 22243), (32, 22267), (33, 22291),

Gene: Bilo\_24 Start: 22473, Stop: 22868, Start Num: 11

Candidate Starts for Bilo\_24:

(6, 22440), (Start: 11 @22473 has 10 MA's), (14, 22497), (16, 22515), (19, 22584), (20, 22587), (21, 22593), (30, 22734), (32, 22758), (33, 22782),

Gene: Bing\_29 Start: 24774, Stop: 25172, Start Num: 9

Candidate Starts for Bing\_29:

(Start: 9 @24774 has 28 MA's), (Start: 12 @24792 has 2 MA's), (15, 24810), (18, 24846), (19, 24888), (20, 24891), (23, 24915), (29, 25035), (30, 25038), (31, 25047),

Gene: CherryBlossom\_28 Start: 24924, Stop: 25322, Start Num: 9

Candidate Starts for CherryBlossom\_28:

(Start: 9 @24924 has 28 MA's), (Start: 12 @24942 has 2 MA's), (18, 24996), (20, 25041), (21, 25047), (24, 25071), (30, 25188),

Gene: ClubPenguin\_27 Start: 24548, Stop: 24946, Start Num: 10  
Candidate Starts for ClubPenguin\_27:  
(Start: 10 @24548 has 1 MA's), (20, 24665), (23, 24689), (29, 24809), (30, 24812),

Gene: CricKo\_26 Start: 23808, Stop: 24212, Start Num: 9  
Candidate Starts for CricKo\_26:  
(7, 23802), (Start: 9 @23808 has 28 MA's), (Start: 12 @23829 has 2 MA's), (13, 23835), (16, 23856),  
(20, 23928), (21, 23934), (30, 24075),

Gene: Doxi13\_24 Start: 21953, Stop: 22348, Start Num: 11  
Candidate Starts for Doxi13\_24:  
(6, 21920), (Start: 11 @21953 has 10 MA's), (14, 21977), (16, 21995), (19, 22064), (20, 22067), (30,  
22214), (32, 22238), (33, 22262),

Gene: DrGrey\_28 Start: 25424, Stop: 25822, Start Num: 9  
Candidate Starts for DrGrey\_28:  
(7, 25418), (Start: 9 @25424 has 28 MA's), (Start: 12 @25442 has 2 MA's), (18, 25496), (20, 25541),  
(21, 25547), (24, 25571), (30, 25688),

Gene: Esketit\_28 Start: 24907, Stop: 25305, Start Num: 9  
Candidate Starts for Esketit\_28:  
(Start: 9 @24907 has 28 MA's), (Start: 12 @24925 has 2 MA's), (18, 24979), (20, 25024), (21, 25030),  
(24, 25054), (30, 25171),

Gene: FidgetOrca\_28 Start: 24913, Stop: 25311, Start Num: 9  
Candidate Starts for FidgetOrca\_28:  
(7, 24907), (Start: 9 @24913 has 28 MA's), (Start: 12 @24931 has 2 MA's), (18, 24985), (20, 25030),  
(21, 25036), (24, 25060), (30, 25177),

Gene: FrodoSwaggins\_28 Start: 25424, Stop: 25822, Start Num: 9  
Candidate Starts for FrodoSwaggins\_28:  
(7, 25418), (Start: 9 @25424 has 28 MA's), (Start: 12 @25442 has 2 MA's), (18, 25496), (20, 25541),  
(21, 25547), (24, 25571), (30, 25688),

Gene: FromIndy\_27 Start: 23796, Stop: 24200, Start Num: 9  
Candidate Starts for FromIndy\_27:  
(7, 23790), (Start: 9 @23796 has 28 MA's), (Start: 12 @23817 has 2 MA's), (13, 23823), (16, 23844),  
(20, 23916), (21, 23922), (30, 24063),

Gene: GirlPower\_27 Start: 26395, Stop: 26793, Start Num: 9  
Candidate Starts for GirlPower\_27:  
(7, 26389), (Start: 9 @26395 has 28 MA's), (Start: 12 @26413 has 2 MA's), (18, 26467), (20, 26512),  
(21, 26518), (24, 26542), (30, 26659),

Gene: GoblinVoyage\_24 Start: 21953, Stop: 22348, Start Num: 11  
Candidate Starts for GoblinVoyage\_24:  
(6, 21920), (Start: 11 @21953 has 10 MA's), (14, 21977), (16, 21995), (19, 22064), (20, 22067), (30,  
22214), (32, 22238), (33, 22262),

Gene: Hoshi\_28 Start: 24907, Stop: 25305, Start Num: 9  
Candidate Starts for Hoshi\_28:  
(Start: 9 @24907 has 28 MA's), (Start: 12 @24925 has 2 MA's), (18, 24979), (20, 25024), (21, 25030),  
(24, 25054), (30, 25171),

Gene: HotFries\_23 Start: 21952, Stop: 22347, Start Num: 11

Candidate Starts for HotFries\_23:

(6, 21919), (Start: 11 @21952 has 10 MA's), (14, 21976), (16, 21994), (19, 22063), (20, 22066), (21, 22072), (30, 22213), (32, 22237), (33, 22261),

Gene: IceWarrior\_28 Start: 24907, Stop: 25305, Start Num: 9

Candidate Starts for IceWarrior\_28:

(Start: 9 @24907 has 28 MA's), (Start: 12 @24925 has 2 MA's), (18, 24979), (20, 25024), (21, 25030), (24, 25054), (30, 25171),

Gene: Indigenous\_28 Start: 24907, Stop: 25305, Start Num: 9

Candidate Starts for Indigenous\_28:

(Start: 9 @24907 has 28 MA's), (Start: 12 @24925 has 2 MA's), (18, 24979), (20, 25024), (21, 25030), (24, 25054), (30, 25171),

Gene: Jaylociraptor\_28 Start: 24907, Stop: 25305, Start Num: 9

Candidate Starts for Jaylociraptor\_28:

(7, 24901), (Start: 9 @24907 has 28 MA's), (Start: 12 @24925 has 2 MA's), (18, 24979), (20, 25024), (21, 25030), (24, 25054), (30, 25171),

Gene: Kardashian\_27 Start: 24854, Stop: 25255, Start Num: 9

Candidate Starts for Kardashian\_27:

(7, 24845), (Start: 9 @24854 has 28 MA's), (Start: 12 @24875 has 2 MA's), (13, 24881), (16, 24902), (17, 24917), (19, 24971), (20, 24974), (21, 24980), (30, 25121), (31, 25130),

Gene: LibertyBell\_26 Start: 23755, Stop: 24153, Start Num: 9

Candidate Starts for LibertyBell\_26:

(1, 23566), (2, 23575), (3, 23635), (4, 23674), (5, 23692), (Start: 9 @23755 has 28 MA's), (Start: 12 @23773 has 2 MA's), (15, 23791), (20, 23872), (21, 23878), (30, 24019),

Gene: Madamoto\_28 Start: 24885, Stop: 25283, Start Num: 9

Candidate Starts for Madamoto\_28:

(7, 24879), (Start: 9 @24885 has 28 MA's), (Start: 12 @24903 has 2 MA's), (20, 25002), (21, 25008), (30, 25149),

Gene: Maya\_28 Start: 24921, Stop: 25319, Start Num: 9

Candidate Starts for Maya\_28:

(7, 24915), (Start: 9 @24921 has 28 MA's), (Start: 12 @24939 has 2 MA's), (18, 24993), (20, 25038), (21, 25044), (24, 25068), (30, 25185),

Gene: Meibysrarus\_28 Start: 24907, Stop: 25305, Start Num: 9

Candidate Starts for Meibysrarus\_28:

(7, 24901), (Start: 9 @24907 has 28 MA's), (Start: 12 @24925 has 2 MA's), (18, 24979), (20, 25024), (21, 25030), (24, 25054), (30, 25171),

Gene: Miek\_26 Start: 23808, Stop: 24212, Start Num: 9

Candidate Starts for Miek\_26:

(7, 23802), (Start: 9 @23808 has 28 MA's), (Start: 12 @23829 has 2 MA's), (13, 23835), (16, 23856), (20, 23928), (21, 23934), (30, 24075),

Gene: Moozy\_24 Start: 21969, Stop: 22364, Start Num: 11

Candidate Starts for Moozy\_24:

(6, 21936), (Start: 11 @21969 has 10 MA's), (14, 21993), (16, 22011), (19, 22080), (20, 22083), (21, 22089), (30, 22230), (32, 22254), (33, 22278),

Gene: Namo\_28 Start: 24913, Stop: 25311, Start Num: 9

Candidate Starts for Namo\_28:

(Start: 9 @24913 has 28 MA's), (Start: 12 @24931 has 2 MA's), (18, 24985), (20, 25030), (21, 25036), (24, 25060), (30, 25177),

Gene: OlympicHelado\_28 Start: 24931, Stop: 25311, Start Num: 12

Candidate Starts for OlympicHelado\_28:

(Start: 9 @24913 has 28 MA's), (Start: 12 @24931 has 2 MA's), (18, 24985), (20, 25030), (21, 25036), (24, 25060), (30, 25177),

Gene: PherryCruz\_23 Start: 21954, Stop: 22349, Start Num: 11

Candidate Starts for PherryCruz\_23:

(6, 21921), (Start: 11 @21954 has 10 MA's), (14, 21978), (16, 21996), (19, 22065), (20, 22068), (22, 22089), (30, 22215), (32, 22239), (33, 22263),

Gene: Popy\_28 Start: 25424, Stop: 25822, Start Num: 9

Candidate Starts for Popy\_28:

(7, 25418), (Start: 9 @25424 has 28 MA's), (Start: 12 @25442 has 2 MA's), (18, 25496), (20, 25541), (21, 25547), (24, 25571), (30, 25688),

Gene: Rainydai\_26 Start: 23808, Stop: 24212, Start Num: 9

Candidate Starts for Rainydai\_26:

(7, 23802), (Start: 9 @23808 has 28 MA's), (Start: 12 @23829 has 2 MA's), (13, 23835), (16, 23856), (20, 23928), (21, 23934), (30, 24075),

Gene: RavenPuff\_23 Start: 21954, Stop: 22349, Start Num: 11

Candidate Starts for RavenPuff\_23:

(6, 21921), (Start: 11 @21954 has 10 MA's), (14, 21978), (16, 21996), (19, 22065), (20, 22068), (22, 22089), (30, 22215), (32, 22239), (33, 22263),

Gene: Regigigas\_27 Start: 23934, Stop: 24212, Start Num: 21

Candidate Starts for Regigigas\_27:

(7, 23802), (Start: 9 @23808 has 28 MA's), (Start: 12 @23829 has 2 MA's), (13, 23835), (16, 23856), (20, 23928), (21, 23934), (30, 24075),

Gene: Rima\_28 Start: 24913, Stop: 25311, Start Num: 9

Candidate Starts for Rima\_28:

(Start: 9 @24913 has 28 MA's), (Start: 12 @24931 has 2 MA's), (18, 24985), (20, 25030), (21, 25036), (24, 25060), (30, 25177),

Gene: RosaAsantewaa\_24 Start: 21825, Stop: 22220, Start Num: 11

Candidate Starts for RosaAsantewaa\_24:

(Start: 11 @21825 has 10 MA's), (14, 21849), (16, 21867), (18, 21894), (19, 21936), (20, 21939), (23, 21963), (26, 22005), (29, 22083), (30, 22086),

Gene: Scap1\_24 Start: 21905, Stop: 22297, Start Num: 8

Candidate Starts for Scap1\_24:

(Start: 8 @21905 has 1 MA's), (Start: 12 @21926 has 2 MA's), (19, 22022), (20, 22025), (25, 22070), (27, 22100), (28, 22157), (30, 22172), (32, 22196),

Gene: SendItCS\_25 Start: 23808, Stop: 24212, Start Num: 9

Candidate Starts for SendItCS\_25:

(7, 23802), (Start: 9 @23808 has 28 MA's), (Start: 12 @23829 has 2 MA's), (13, 23835), (16, 23856), (20, 23928), (21, 23934), (30, 24075),

Gene: SheRa\_24 Start: 21953, Stop: 22348, Start Num: 11

Candidate Starts for SheRa\_24:

(6, 21920), (Start: 11 @21953 has 10 MA's), (14, 21977), (16, 21995), (19, 22064), (20, 22067), (21, 22073), (30, 22214), (32, 22238), (33, 22262),

Gene: Soshi\_28 Start: 25430, Stop: 25828, Start Num: 9

Candidate Starts for Soshi\_28:

(7, 25424), (Start: 9 @25430 has 28 MA's), (Start: 12 @25448 has 2 MA's), (18, 25502), (20, 25547), (21, 25553), (24, 25577), (30, 25694),

Gene: Spectropatronm\_28 Start: 24925, Stop: 25305, Start Num: 12

Candidate Starts for Spectropatronm\_28:

(Start: 9 @24907 has 28 MA's), (Start: 12 @24925 has 2 MA's), (18, 24979), (20, 25024), (21, 25030), (24, 25054), (30, 25171),

Gene: TaidaOne\_28 Start: 25555, Stop: 25953, Start Num: 9

Candidate Starts for TaidaOne\_28:

(Start: 9 @25555 has 28 MA's), (Start: 12 @25573 has 2 MA's), (18, 25627), (20, 25672), (21, 25678), (24, 25702), (30, 25819),

Gene: Thiqqums\_26 Start: 23808, Stop: 24212, Start Num: 9

Candidate Starts for Thiqqums\_26:

(7, 23802), (Start: 9 @23808 has 28 MA's), (Start: 12 @23829 has 2 MA's), (13, 23835), (16, 23856), (20, 23928), (21, 23934), (30, 24075),

Gene: TieDye\_27 Start: 24599, Stop: 24997, Start Num: 9

Candidate Starts for TieDye\_27:

(Start: 9 @24599 has 28 MA's), (Start: 12 @24617 has 2 MA's), (18, 24671), (20, 24716), (21, 24722), (24, 24746), (30, 24863),

Gene: TonyStarch\_28 Start: 24913, Stop: 25311, Start Num: 9

Candidate Starts for TonyStarch\_28:

(Start: 9 @24913 has 28 MA's), (Start: 12 @24931 has 2 MA's), (18, 24985), (20, 25030), (21, 25036), (24, 25060), (30, 25177),