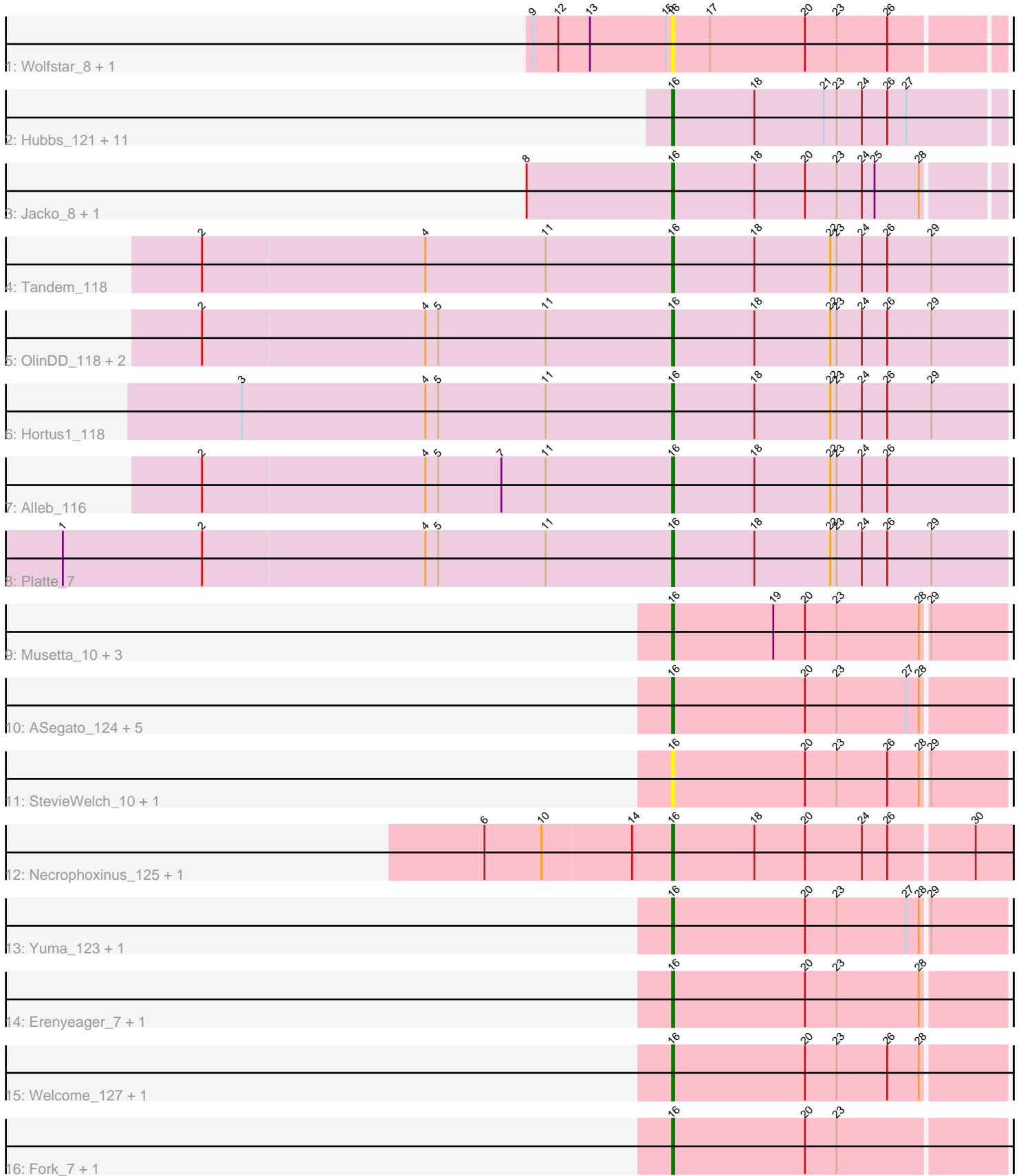


Pham 170077



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 170077 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170077 has 45 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar\_8, Wolfstar\_124
- Track 2 : Hubbs\_121, Roman\_123, DejaVu\_7, Hubbs\_7, PhillyPhilly\_118, Pavlo\_119, Lupine\_117, PhillyPhilly\_8, Lupine\_7, DejaVu\_123, Pavlo\_7, Roman\_7
- Track 3 : Jacko\_8, Jacko\_117
- Track 4 : Tandem\_118
- Track 5 : OlinDD\_118, Platte\_117, Pioneer3\_118
- Track 6 : Hortus1\_118
- Track 7 : Alleb\_116
- Track 8 : Platte\_7
- Track 9 : Musetta\_10, Lyell\_125, Lyell\_10, Musetta\_123
- Track 10 : ASegato\_124, DustyDino\_10, ASegato\_10, DustyDino\_128, RunningBrook\_128, RunningBrook\_10
- Track 11 : StevieWelch\_10, StevieWelch\_128
- Track 12 : Necrophoxinus\_125, Necrophoxinus\_9
- Track 13 : Yuma\_123, Yuma\_10
- Track 14 : Erenyeager\_7, Erenyeager\_122
- Track 15 : Welcome\_127, Welcome\_10
- Track 16 : Fork\_7, Fork\_119

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

The start number called the most often in the published annotations is 16, it was called in 39 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato\_10, ASegato\_124, Alleb\_116, DejaVu\_123, DejaVu\_7, DustyDino\_10, DustyDino\_128, Erenyeager\_122, Erenyeager\_7, Fork\_119, Fork\_7, Hortus1\_118, Hubbs\_121, Hubbs\_7, Jacko\_117, Jacko\_8, Lupine\_117, Lupine\_7, Lyell\_10, Lyell\_125, Musetta\_10, Musetta\_123, Necrophoxinus\_125, Necrophoxinus\_9, OlinDD\_118, Pavlo\_119, Pavlo\_7, PhillyPhilly\_118, PhillyPhilly\_8, Pioneer3\_118, Platte\_117, Platte\_7, Roman\_123, Roman\_7, RunningBrook\_10, RunningBrook\_128, StevieWelch\_10, StevieWelch\_128, Tandem\_118, Welcome\_10, Welcome\_127, Wolfstar\_124, Wolfstar\_8, Yuma\_10, Yuma\_123,

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

- 

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

- 

### Summary by start number:

Start 16:

- Found in 45 of 45 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 39 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASegato\_10 (ED2), ASegato\_124 (ED2), Alleb\_116 (ED1), DejaVu\_123 (ED1), DejaVu\_7 (ED1), DustyDino\_10 (ED2), DustyDino\_128 (ED2), Erenyeager\_122 (ED2), Erenyeager\_7 (ED2), Fork\_119 (ED2), Fork\_7 (ED2), Hortus1\_118 (ED1), Hubbs\_121 (ED1), Hubbs\_7 (ED1), Jacko\_117 (ED1), Jacko\_8 (ED1), Lupine\_117 (ED1), Lupine\_7 (ED1), Lyell\_10 (ED2), Lyell\_125 (ED2), Musetta\_10 (ED2), Musetta\_123 (ED2), Necrophoxinus\_125 (ED2), Necrophoxinus\_9 (ED2), OlinDD\_118 (ED1), Pavlo\_119 (ED1), Pavlo\_7 (ED1), PhillyPhilly\_118 (ED1), PhillyPhilly\_8 (ED1), Pioneer3\_118 (ED1), Platte\_117 (ED1), Platte\_7 (ED1), Roman\_123 (ED1), Roman\_7 (ED1), RunningBrook\_10 (ED2), RunningBrook\_128 (ED2), StevieWelch\_10 (ED2), StevieWelch\_128 (ED2), Tandem\_118 (ED1), Welcome\_10 (ED2), Welcome\_127 (ED2), Wolfstar\_124 (ED), Wolfstar\_8 (ED), Yuma\_10 (ED2), Yuma\_123 (ED2),

### Summary by clusters:

There are 3 clusters represented in this pham: ED2, ED, ED1,

Info for manual annotations of cluster ED1:

- Start number 16 was manually annotated 21 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 16 was manually annotated 18 times for cluster ED2.

### Gene Information:

Gene: ASegato\_124 Start: 62989, Stop: 62834, Start Num: 16

Candidate Starts for ASegato\_124:

(Start: 16 @62989 has 39 MA's), (20, 62926), (23, 62911), (27, 62878), (28, 62872),

Gene: ASegato\_10 Start: 3540, Stop: 3385, Start Num: 16

Candidate Starts for ASegato\_10:

(Start: 16 @3540 has 39 MA's), (20, 3477), (23, 3462), (27, 3429), (28, 3423),

Gene: Alleb\_116 Start: 62427, Stop: 62269, Start Num: 16

Candidate Starts for Alleb\_116:

(2, 62649), (4, 62544), (5, 62538), (7, 62508), (11, 62487), (Start: 16 @62427 has 39 MA's), (18, 62388), (22, 62352), (23, 62349), (24, 62337), (26, 62325),

Gene: DejaVu\_7 Start: 2697, Stop: 2542, Start Num: 16  
Candidate Starts for DejaVu\_7:  
(Start: 16 @2697 has 39 MA's), (18, 2658), (21, 2625), (23, 2619), (24, 2607), (26, 2595), (27, 2586),

Gene: DejaVu\_123 Start: 63077, Stop: 62922, Start Num: 16  
Candidate Starts for DejaVu\_123:  
(Start: 16 @63077 has 39 MA's), (18, 63038), (21, 63005), (23, 62999), (24, 62987), (26, 62975), (27, 62966),

Gene: DustyDino\_10 Start: 3578, Stop: 3423, Start Num: 16  
Candidate Starts for DustyDino\_10:  
(Start: 16 @3578 has 39 MA's), (20, 3515), (23, 3500), (27, 3467), (28, 3461),

Gene: DustyDino\_128 Start: 63668, Stop: 63513, Start Num: 16  
Candidate Starts for DustyDino\_128:  
(Start: 16 @63668 has 39 MA's), (20, 63605), (23, 63590), (27, 63557), (28, 63551),

Gene: Erenyeager\_7 Start: 2956, Stop: 2801, Start Num: 16  
Candidate Starts for Erenyeager\_7:  
(Start: 16 @2956 has 39 MA's), (20, 2893), (23, 2878), (28, 2839),

Gene: Erenyeager\_122 Start: 62617, Stop: 62462, Start Num: 16  
Candidate Starts for Erenyeager\_122:  
(Start: 16 @62617 has 39 MA's), (20, 62554), (23, 62539), (28, 62500),

Gene: Fork\_7 Start: 2844, Stop: 2689, Start Num: 16  
Candidate Starts for Fork\_7:  
(Start: 16 @2844 has 39 MA's), (20, 2781), (23, 2766),

Gene: Fork\_119 Start: 61835, Stop: 61680, Start Num: 16  
Candidate Starts for Fork\_119:  
(Start: 16 @61835 has 39 MA's), (20, 61772), (23, 61757),

Gene: Hortus1\_118 Start: 62861, Stop: 62703, Start Num: 16  
Candidate Starts for Hortus1\_118:  
(3, 63065), (4, 62978), (5, 62972), (11, 62921), (Start: 16 @62861 has 39 MA's), (18, 62822), (22, 62786), (23, 62783), (24, 62771), (26, 62759), (29, 62738),

Gene: Hubbs\_121 Start: 63600, Stop: 63445, Start Num: 16  
Candidate Starts for Hubbs\_121:  
(Start: 16 @63600 has 39 MA's), (18, 63561), (21, 63528), (23, 63522), (24, 63510), (26, 63498), (27, 63489),

Gene: Hubbs\_7 Start: 3201, Stop: 3046, Start Num: 16  
Candidate Starts for Hubbs\_7:  
(Start: 16 @3201 has 39 MA's), (18, 3162), (21, 3129), (23, 3123), (24, 3111), (26, 3099), (27, 3090),

Gene: Jacko\_8 Start: 2762, Stop: 2610, Start Num: 16  
Candidate Starts for Jacko\_8:  
(8, 2828), (Start: 16 @2762 has 39 MA's), (18, 2723), (20, 2699), (23, 2684), (24, 2672), (25, 2666), (28, 2645),

Gene: Jacko\_117 Start: 61155, Stop: 61003, Start Num: 16

Candidate Starts for Jacko\_117:

(8, 61221), (Start: 16 @61155 has 39 MA's), (18, 61116), (20, 61092), (23, 61077), (24, 61065), (25, 61059), (28, 61038),

Gene: Lupine\_117 Start: 62271, Stop: 62116, Start Num: 16

Candidate Starts for Lupine\_117:

(Start: 16 @62271 has 39 MA's), (18, 62232), (21, 62199), (23, 62193), (24, 62181), (26, 62169), (27, 62160),

Gene: Lupine\_7 Start: 2998, Stop: 2843, Start Num: 16

Candidate Starts for Lupine\_7:

(Start: 16 @2998 has 39 MA's), (18, 2959), (21, 2926), (23, 2920), (24, 2908), (26, 2896), (27, 2887),

Gene: Lyell\_125 Start: 62460, Stop: 62305, Start Num: 16

Candidate Starts for Lyell\_125:

(Start: 16 @62460 has 39 MA's), (19, 62412), (20, 62397), (23, 62382), (28, 62343), (29, 62340),

Gene: Lyell\_10 Start: 3293, Stop: 3138, Start Num: 16

Candidate Starts for Lyell\_10:

(Start: 16 @3293 has 39 MA's), (19, 3245), (20, 3230), (23, 3215), (28, 3176), (29, 3173),

Gene: Musetta\_10 Start: 3554, Stop: 3399, Start Num: 16

Candidate Starts for Musetta\_10:

(Start: 16 @3554 has 39 MA's), (19, 3506), (20, 3491), (23, 3476), (28, 3437), (29, 3434),

Gene: Musetta\_123 Start: 63349, Stop: 63194, Start Num: 16

Candidate Starts for Musetta\_123:

(Start: 16 @63349 has 39 MA's), (19, 63301), (20, 63286), (23, 63271), (28, 63232), (29, 63229),

Gene: Necrophoxinus\_125 Start: 63328, Stop: 63170, Start Num: 16

Candidate Starts for Necrophoxinus\_125:

(6, 63412), (10, 63385), (14, 63343), (Start: 16 @63328 has 39 MA's), (18, 63289), (20, 63265), (24, 63238), (26, 63226), (30, 63187),

Gene: Necrophoxinus\_9 Start: 3085, Stop: 2927, Start Num: 16

Candidate Starts for Necrophoxinus\_9:

(6, 3169), (10, 3142), (14, 3100), (Start: 16 @3085 has 39 MA's), (18, 3046), (20, 3022), (24, 2995), (26, 2983), (30, 2944),

Gene: OlinDD\_118 Start: 62866, Stop: 62708, Start Num: 16

Candidate Starts for OlinDD\_118:

(2, 63088), (4, 62983), (5, 62977), (11, 62926), (Start: 16 @62866 has 39 MA's), (18, 62827), (22, 62791), (23, 62788), (24, 62776), (26, 62764), (29, 62743),

Gene: Pavlo\_119 Start: 63348, Stop: 63193, Start Num: 16

Candidate Starts for Pavlo\_119:

(Start: 16 @63348 has 39 MA's), (18, 63309), (21, 63276), (23, 63270), (24, 63258), (26, 63246), (27, 63237),

Gene: Pavlo\_7 Start: 3092, Stop: 2937, Start Num: 16

Candidate Starts for Pavlo\_7:

(Start: 16 @3092 has 39 MA's), (18, 3053), (21, 3020), (23, 3014), (24, 3002), (26, 2990), (27, 2981),

Gene: PhillyPhilly\_118 Start: 62607, Stop: 62452, Start Num: 16  
Candidate Starts for PhillyPhilly\_118:  
(Start: 16 @62607 has 39 MA's), (18, 62568), (21, 62535), (23, 62529), (24, 62517), (26, 62505), (27, 62496),

Gene: PhillyPhilly\_8 Start: 3118, Stop: 2963, Start Num: 16  
Candidate Starts for PhillyPhilly\_8:  
(Start: 16 @3118 has 39 MA's), (18, 3079), (21, 3046), (23, 3040), (24, 3028), (26, 3016), (27, 3007),

Gene: Pioneer3\_118 Start: 62697, Stop: 62539, Start Num: 16  
Candidate Starts for Pioneer3\_118:  
(2, 62919), (4, 62814), (5, 62808), (11, 62757), (Start: 16 @62697 has 39 MA's), (18, 62658), (22, 62622), (23, 62619), (24, 62607), (26, 62595), (29, 62574),

Gene: Platte\_7 Start: 2923, Stop: 2765, Start Num: 16  
Candidate Starts for Platte\_7:  
(1, 3211), (2, 3145), (4, 3040), (5, 3034), (11, 2983), (Start: 16 @2923 has 39 MA's), (18, 2884), (22, 2848), (23, 2845), (24, 2833), (26, 2821), (29, 2800),

Gene: Platte\_117 Start: 62471, Stop: 62313, Start Num: 16  
Candidate Starts for Platte\_117:  
(2, 62693), (4, 62588), (5, 62582), (11, 62531), (Start: 16 @62471 has 39 MA's), (18, 62432), (22, 62396), (23, 62393), (24, 62381), (26, 62369), (29, 62348),

Gene: Roman\_123 Start: 63997, Stop: 63842, Start Num: 16  
Candidate Starts for Roman\_123:  
(Start: 16 @63997 has 39 MA's), (18, 63958), (21, 63925), (23, 63919), (24, 63907), (26, 63895), (27, 63886),

Gene: Roman\_7 Start: 2910, Stop: 2755, Start Num: 16  
Candidate Starts for Roman\_7:  
(Start: 16 @2910 has 39 MA's), (18, 2871), (21, 2838), (23, 2832), (24, 2820), (26, 2808), (27, 2799),

Gene: RunningBrook\_128 Start: 63668, Stop: 63513, Start Num: 16  
Candidate Starts for RunningBrook\_128:  
(Start: 16 @63668 has 39 MA's), (20, 63605), (23, 63590), (27, 63557), (28, 63551),

Gene: RunningBrook\_10 Start: 3578, Stop: 3423, Start Num: 16  
Candidate Starts for RunningBrook\_10:  
(Start: 16 @3578 has 39 MA's), (20, 3515), (23, 3500), (27, 3467), (28, 3461),

Gene: StevieWelch\_10 Start: 3469, Stop: 3314, Start Num: 16  
Candidate Starts for StevieWelch\_10:  
(Start: 16 @3469 has 39 MA's), (20, 3406), (23, 3391), (26, 3367), (28, 3352), (29, 3349),

Gene: StevieWelch\_128 Start: 63715, Stop: 63560, Start Num: 16  
Candidate Starts for StevieWelch\_128:  
(Start: 16 @63715 has 39 MA's), (20, 63652), (23, 63637), (26, 63613), (28, 63598), (29, 63595),

Gene: Tandem\_118 Start: 62871, Stop: 62713, Start Num: 16  
Candidate Starts for Tandem\_118:  
(2, 63093), (4, 62988), (11, 62931), (Start: 16 @62871 has 39 MA's), (18, 62832), (22, 62796), (23, 62793), (24, 62781), (26, 62769), (29, 62748),

Gene: Welcome\_127 Start: 63695, Stop: 63540, Start Num: 16

Candidate Starts for Welcome\_127:

(Start: 16 @63695 has 39 MA's), (20, 63632), (23, 63617), (26, 63593), (28, 63578),

Gene: Welcome\_10 Start: 3551, Stop: 3396, Start Num: 16

Candidate Starts for Welcome\_10:

(Start: 16 @3551 has 39 MA's), (20, 3488), (23, 3473), (26, 3449), (28, 3434),

Gene: Wolfstar\_8 Start: 3487, Stop: 3335, Start Num: 16

Candidate Starts for Wolfstar\_8:

(9, 3553), (12, 3541), (13, 3526), (15, 3490), (Start: 16 @3487 has 39 MA's), (17, 3469), (20, 3424), (23, 3409), (26, 3385),

Gene: Wolfstar\_124 Start: 64628, Stop: 64476, Start Num: 16

Candidate Starts for Wolfstar\_124:

(9, 64694), (12, 64682), (13, 64667), (15, 64631), (Start: 16 @64628 has 39 MA's), (17, 64610), (20, 64565), (23, 64550), (26, 64526),

Gene: Yuma\_123 Start: 62501, Stop: 62346, Start Num: 16

Candidate Starts for Yuma\_123:

(Start: 16 @62501 has 39 MA's), (20, 62438), (23, 62423), (27, 62390), (28, 62384), (29, 62381),

Gene: Yuma\_10 Start: 3450, Stop: 3295, Start Num: 16

Candidate Starts for Yuma\_10:

(Start: 16 @3450 has 39 MA's), (20, 3387), (23, 3372), (27, 3339), (28, 3333), (29, 3330),