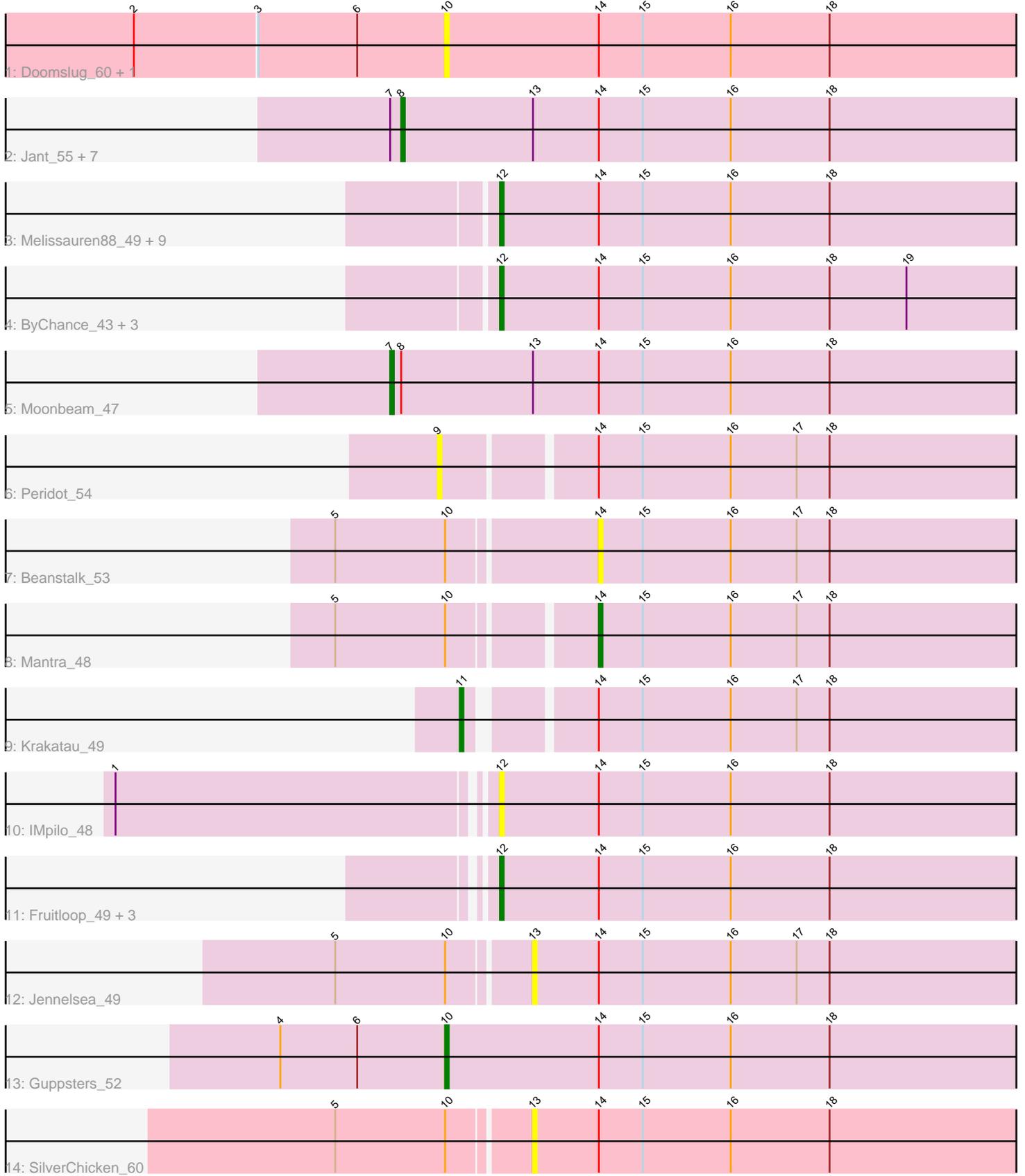


Pham 283996



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 283996 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283996 has 37 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Doomslug\_60, Ms6\_45
- Track 2 : Jant\_55, Emma\_51, Medindi\_49, Filuzino\_49, Hegedechwinu\_51, PhesterPhotato\_53, MilleniumForce\_51, Beakin\_53
- Track 3 : Melissauren88\_49, VRedHorse\_51, CaptainTrips\_48, MinionDave\_50, XFactor\_49, Batiatus\_49, StAnnes\_50, Enby\_52, Lorde\_52, SG4\_48
- Track 4 : ByChance\_43, Gorge\_56, Hades\_52, Saal\_54
- Track 5 : Moonbeam\_47
- Track 6 : Peridot\_54
- Track 7 : Beanstalk\_53
- Track 8 : Mantra\_48
- Track 9 : Krakatau\_49
- Track 10 : IMpilo\_48
- Track 11 : Fruitloop\_49, Phalconet\_50, DLane\_47, Ovechkin\_48
- Track 12 : Jennelsea\_49
- Track 13 : Guppsters\_52
- Track 14 : SilverChicken\_60

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

The start number called the most often in the published annotations is 12, it was called in 18 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Batiatus\_49, ByChance\_43, CaptainTrips\_48, DLane\_47, Enby\_52, Fruitloop\_49, Gorge\_56, Hades\_52, IMpilo\_48, Lorde\_52, Melissauren88\_49, MinionDave\_50, Ovechkin\_48, Phalconet\_50, SG4\_48, Saal\_54, StAnnes\_50, VRedHorse\_51, XFactor\_49,

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

- 

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

- Beakin\_53, Beanstalk\_53, Doomslug\_60, Emma\_51, Filuzino\_49, Guppsters\_52, Hegedechwinu\_51, Jant\_55, Jennelsea\_49, Krakatau\_49, Mantra\_48, Medindi\_49,

MilleniumForce\_51, Moonbeam\_47, Ms6\_45, Peridot\_54, PhesterPhotato\_53, SilverChicken\_60,

### Summary by start number:

#### Start 7:

- Found in 9 of 37 ( 24.3% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Moonbeam\_47 (F1),

#### Start 8:

- Found in 9 of 37 ( 24.3% ) of genes in pham
- Manual Annotations of this start: 6 of 28
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Beakin\_53 (F1), Emma\_51 (F1), Filuzino\_49 (F1), Hegedechwinu\_51 (F1), Jant\_55 (F1), Medindi\_49 (F1), MilleniumForce\_51 (F1), PhesterPhotato\_53 (F1),

#### Start 9:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Peridot\_54 (F1),

#### Start 10:

- Found in 7 of 37 ( 18.9% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Doomslug\_60 (F), Guppsters\_52 (F1), Ms6\_45 (F1),

#### Start 11:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Krakatau\_49 (F1),

#### Start 12:

- Found in 19 of 37 ( 51.4% ) of genes in pham
- Manual Annotations of this start: 18 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Batiatus\_49 (F1), ByChance\_43 (F1), CaptainTrips\_48 (F1), DLane\_47 (F1), Enby\_52 (F1), Fruitloop\_49 (F1), Gorge\_56 (F1), Hades\_52 (F1), IMpilo\_48 (F1), Lorde\_52 (F1), Melissauren88\_49 (F1), MinionDave\_50 (F1), Ovechkin\_48 (F1), Phalconet\_50 (F1), SG4\_48 (F1), Saal\_54 (F1), StAnnes\_50 (F1), VRedHorse\_51 (F1), XFactor\_49 (F1),

#### Start 13:

- Found in 11 of 37 ( 29.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 18.2% of time when present

- Phage (with cluster) where this start called: Jennelsea\_49 (F1), SilverChicken\_60 (F2),

Start 14:

- Found in 37 of 37 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 5.4% of time when present
- Phage (with cluster) where this start called: Beanstalk\_53 (F1), Mantra\_48 (F1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: F1, F2, F,

Info for manual annotations of cluster F1:

- Start number 7 was manually annotated 1 time for cluster F1.
- Start number 8 was manually annotated 6 times for cluster F1.
- Start number 10 was manually annotated 1 time for cluster F1.
- Start number 11 was manually annotated 1 time for cluster F1.
- Start number 12 was manually annotated 18 times for cluster F1.
- Start number 14 was manually annotated 1 time for cluster F1.

### **Gene Information:**

Gene: Batiatus\_49 Start: 36900, Stop: 37049, Start Num: 12

Candidate Starts for Batiatus\_49:

(Start: 12 @36900 has 18 MA's), (Start: 14 @36927 has 1 MA's), (15, 36939), (16, 36963), (18, 36990),

Gene: Beakin\_53 Start: 36720, Stop: 36896, Start Num: 8

Candidate Starts for Beakin\_53:

(Start: 7 @36717 has 1 MA's), (Start: 8 @36720 has 6 MA's), (13, 36756), (Start: 14 @36774 has 1 MA's), (15, 36786), (16, 36810), (18, 36837),

Gene: Beanstalk\_53 Start: 36332, Stop: 36454, Start Num: 14

Candidate Starts for Beanstalk\_53:

(5, 36263), (Start: 10 @36293 has 1 MA's), (Start: 14 @36332 has 1 MA's), (15, 36344), (16, 36368), (17, 36386), (18, 36395),

Gene: ByChance\_43 Start: 32694, Stop: 32843, Start Num: 12

Candidate Starts for ByChance\_43:

(Start: 12 @32694 has 18 MA's), (Start: 14 @32721 has 1 MA's), (15, 32733), (16, 32757), (18, 32784), (19, 32805),

Gene: CaptainTrips\_48 Start: 35920, Stop: 36069, Start Num: 12

Candidate Starts for CaptainTrips\_48:

(Start: 12 @35920 has 18 MA's), (Start: 14 @35947 has 1 MA's), (15, 35959), (16, 35983), (18, 36010),

Gene: DLane\_47 Start: 36002, Stop: 36151, Start Num: 12

Candidate Starts for DLane\_47:

(Start: 12 @36002 has 18 MA's), (Start: 14 @36029 has 1 MA's), (15, 36041), (16, 36065), (18, 36092),

Gene: Doomslug\_60 Start: 36902, Stop: 37066, Start Num: 10

Candidate Starts for Doomslug\_60:

(2, 36818), (3, 36851), (6, 36878), (Start: 10 @36902 has 1 MA's), (Start: 14 @36944 has 1 MA's), (15, 36956), (16, 36980), (18, 37007),

Gene: Emma\_51 Start: 36232, Stop: 36408, Start Num: 8

Candidate Starts for Emma\_51:

(Start: 7 @36229 has 1 MA's), (Start: 8 @36232 has 6 MA's), (13, 36268), (Start: 14 @36286 has 1 MA's), (15, 36298), (16, 36322), (18, 36349),

Gene: Enby\_52 Start: 35406, Stop: 35555, Start Num: 12

Candidate Starts for Enby\_52:

(Start: 12 @35406 has 18 MA's), (Start: 14 @35433 has 1 MA's), (15, 35445), (16, 35469), (18, 35496),

Gene: Filuzino\_49 Start: 35812, Stop: 35988, Start Num: 8

Candidate Starts for Filuzino\_49:

(Start: 7 @35809 has 1 MA's), (Start: 8 @35812 has 6 MA's), (13, 35848), (Start: 14 @35866 has 1 MA's), (15, 35878), (16, 35902), (18, 35929),

Gene: Fruitloop\_49 Start: 37675, Stop: 37824, Start Num: 12

Candidate Starts for Fruitloop\_49:

(Start: 12 @37675 has 18 MA's), (Start: 14 @37702 has 1 MA's), (15, 37714), (16, 37738), (18, 37765),

Gene: Gorge\_56 Start: 38586, Stop: 38735, Start Num: 12

Candidate Starts for Gorge\_56:

(Start: 12 @38586 has 18 MA's), (Start: 14 @38613 has 1 MA's), (15, 38625), (16, 38649), (18, 38676), (19, 38697),

Gene: Guppsters\_52 Start: 36514, Stop: 36678, Start Num: 10

Candidate Starts for Guppsters\_52:

(4, 36469), (6, 36490), (Start: 10 @36514 has 1 MA's), (Start: 14 @36556 has 1 MA's), (15, 36568), (16, 36592), (18, 36619),

Gene: Hades\_52 Start: 37185, Stop: 37334, Start Num: 12

Candidate Starts for Hades\_52:

(Start: 12 @37185 has 18 MA's), (Start: 14 @37212 has 1 MA's), (15, 37224), (16, 37248), (18, 37275), (19, 37296),

Gene: Hegedechwinu\_51 Start: 35612, Stop: 35788, Start Num: 8

Candidate Starts for Hegedechwinu\_51:

(Start: 7 @35609 has 1 MA's), (Start: 8 @35612 has 6 MA's), (13, 35648), (Start: 14 @35666 has 1 MA's), (15, 35678), (16, 35702), (18, 35729),

Gene: IMPilo\_48 Start: 35282, Stop: 35431, Start Num: 12

Candidate Starts for IMPilo\_48:

(1, 35183), (Start: 12 @35282 has 18 MA's), (Start: 14 @35309 has 1 MA's), (15, 35321), (16, 35345), (18, 35372),

Gene: Jant\_55 Start: 38683, Stop: 38859, Start Num: 8

Candidate Starts for Jant\_55:

(Start: 7 @38680 has 1 MA's), (Start: 8 @38683 has 6 MA's), (13, 38719), (Start: 14 @38737 has 1 MA's), (15, 38749), (16, 38773), (18, 38800),

Gene: Jennelsea\_49 Start: 36027, Stop: 36167, Start Num: 13

Candidate Starts for Jennelsea\_49:

(5, 35976), (Start: 10 @36006 has 1 MA's), (13, 36027), (Start: 14 @36045 has 1 MA's), (15, 36057), (16, 36081), (17, 36099), (18, 36108),

Gene: Krakatau\_49 Start: 36698, Stop: 36850, Start Num: 11

Candidate Starts for Krakatau\_49:

(Start: 11 @36698 has 1 MA's), (Start: 14 @36728 has 1 MA's), (15, 36740), (16, 36764), (17, 36782), (18, 36791),

Gene: Lorde\_52 Start: 35381, Stop: 35530, Start Num: 12

Candidate Starts for Lorde\_52:

(Start: 12 @35381 has 18 MA's), (Start: 14 @35408 has 1 MA's), (15, 35420), (16, 35444), (18, 35471),

Gene: Mantra\_48 Start: 36205, Stop: 36327, Start Num: 14

Candidate Starts for Mantra\_48:

(5, 36139), (Start: 10 @36169 has 1 MA's), (Start: 14 @36205 has 1 MA's), (15, 36217), (16, 36241), (17, 36259), (18, 36268),

Gene: Medindi\_49 Start: 35093, Stop: 35269, Start Num: 8

Candidate Starts for Medindi\_49:

(Start: 7 @35090 has 1 MA's), (Start: 8 @35093 has 6 MA's), (13, 35129), (Start: 14 @35147 has 1 MA's), (15, 35159), (16, 35183), (18, 35210),

Gene: Melissauren88\_49 Start: 36158, Stop: 36307, Start Num: 12

Candidate Starts for Melissauren88\_49:

(Start: 12 @36158 has 18 MA's), (Start: 14 @36185 has 1 MA's), (15, 36197), (16, 36221), (18, 36248),

Gene: MilleniumForce\_51 Start: 38152, Stop: 38328, Start Num: 8

Candidate Starts for MilleniumForce\_51:

(Start: 7 @38149 has 1 MA's), (Start: 8 @38152 has 6 MA's), (13, 38188), (Start: 14 @38206 has 1 MA's), (15, 38218), (16, 38242), (18, 38269),

Gene: MinionDave\_50 Start: 36695, Stop: 36844, Start Num: 12

Candidate Starts for MinionDave\_50:

(Start: 12 @36695 has 18 MA's), (Start: 14 @36722 has 1 MA's), (15, 36734), (16, 36758), (18, 36785),

Gene: Moonbeam\_47 Start: 36185, Stop: 36364, Start Num: 7

Candidate Starts for Moonbeam\_47:

(Start: 7 @36185 has 1 MA's), (Start: 8 @36188 has 6 MA's), (13, 36224), (Start: 14 @36242 has 1 MA's), (15, 36254), (16, 36278), (18, 36305),

Gene: Ms6\_45 Start: 31504, Stop: 31668, Start Num: 10

Candidate Starts for Ms6\_45:

(2, 31420), (3, 31453), (6, 31480), (Start: 10 @31504 has 1 MA's), (Start: 14 @31546 has 1 MA's), (15, 31558), (16, 31582), (18, 31609),

Gene: Ovechkin\_48 Start: 36542, Stop: 36691, Start Num: 12

Candidate Starts for Ovechkin\_48:

(Start: 12 @36542 has 18 MA's), (Start: 14 @36569 has 1 MA's), (15, 36581), (16, 36605), (18, 36632),

Gene: Peridot\_54 Start: 36970, Stop: 37131, Start Num: 9

Candidate Starts for Peridot\_54:

(9, 36970), (Start: 14 @37009 has 1 MA's), (15, 37021), (16, 37045), (17, 37063), (18, 37072),

Gene: Phalconet\_50 Start: 36462, Stop: 36611, Start Num: 12

Candidate Starts for Phalconet\_50:

(Start: 12 @36462 has 18 MA's), (Start: 14 @36489 has 1 MA's), (15, 36501), (16, 36525), (18, 36552),

Gene: PhesterPhotato\_53 Start: 37420, Stop: 37596, Start Num: 8

Candidate Starts for PhesterPhotato\_53:

(Start: 7 @37417 has 1 MA's), (Start: 8 @37420 has 6 MA's), (13, 37456), (Start: 14 @37474 has 1 MA's), (15, 37486), (16, 37510), (18, 37537),

Gene: SG4\_48 Start: 35891, Stop: 36040, Start Num: 12

Candidate Starts for SG4\_48:

(Start: 12 @35891 has 18 MA's), (Start: 14 @35918 has 1 MA's), (15, 35930), (16, 35954), (18, 35981),

Gene: Saal\_54 Start: 38405, Stop: 38554, Start Num: 12

Candidate Starts for Saal\_54:

(Start: 12 @38405 has 18 MA's), (Start: 14 @38432 has 1 MA's), (15, 38444), (16, 38468), (18, 38495), (19, 38516),

Gene: SilverChicken\_60 Start: 37014, Stop: 37154, Start Num: 13

Candidate Starts for SilverChicken\_60:

(5, 36963), (Start: 10 @36993 has 1 MA's), (13, 37014), (Start: 14 @37032 has 1 MA's), (15, 37044), (16, 37068), (18, 37095),

Gene: StAnnes\_50 Start: 37137, Stop: 37286, Start Num: 12

Candidate Starts for StAnnes\_50:

(Start: 12 @37137 has 18 MA's), (Start: 14 @37164 has 1 MA's), (15, 37176), (16, 37200), (18, 37227),

Gene: VRedHorse\_51 Start: 36379, Stop: 36528, Start Num: 12

Candidate Starts for VRedHorse\_51:

(Start: 12 @36379 has 18 MA's), (Start: 14 @36406 has 1 MA's), (15, 36418), (16, 36442), (18, 36469),

Gene: XFactor\_49 Start: 35866, Stop: 36015, Start Num: 12

Candidate Starts for XFactor\_49:

(Start: 12 @35866 has 18 MA's), (Start: 14 @35893 has 1 MA's), (15, 35905), (16, 35929), (18, 35956),