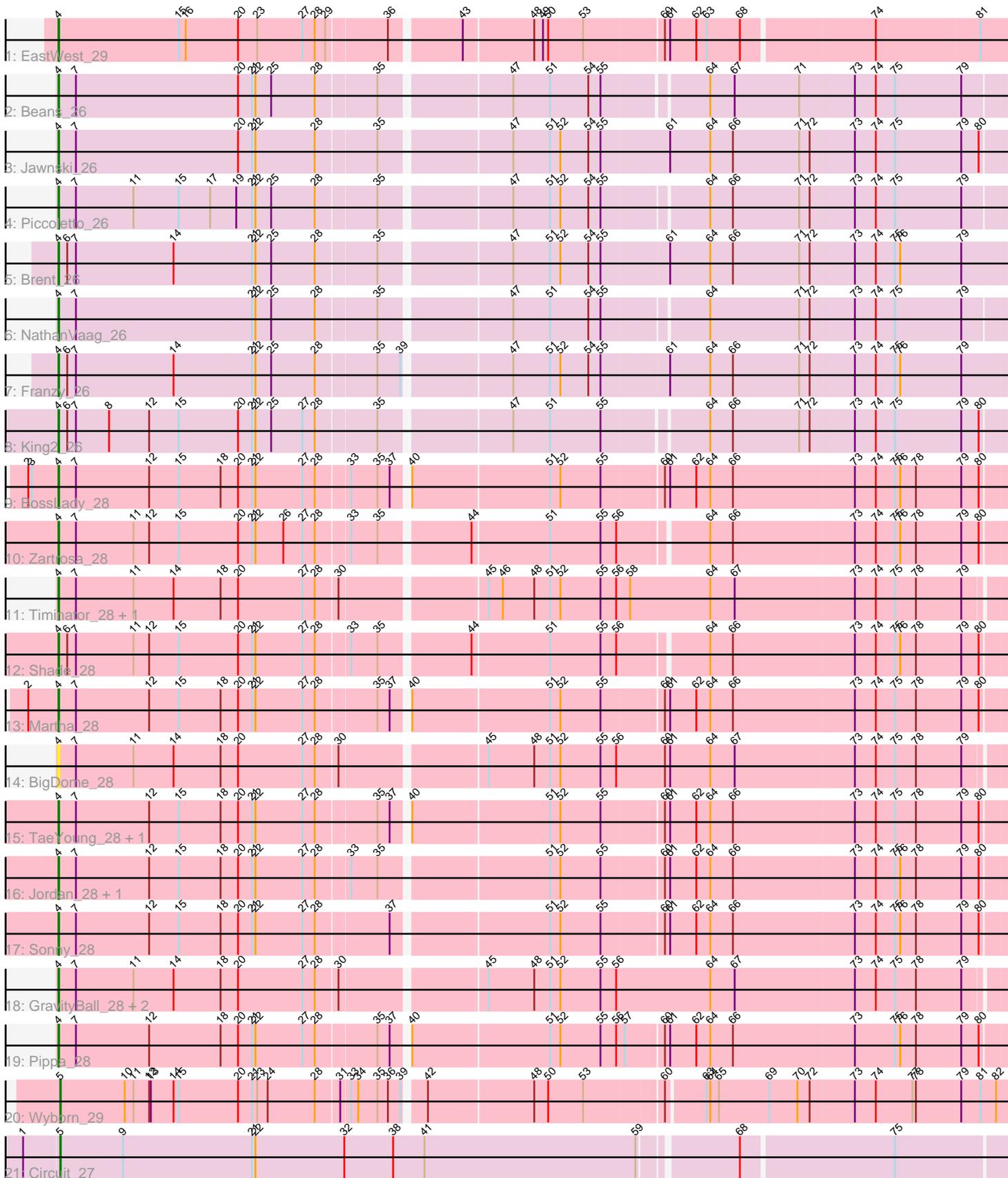


# Pham 291466



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 291466 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291466 has 26 members, 1 are drafts.

Phages represented in each track:

- Track 1 : EastWest\_29
- Track 2 : Beans\_26
- Track 3 : Jawnski\_26
- Track 4 : Piccoletto\_26
- Track 5 : Brent\_26
- Track 6 : NathanVaag\_26
- Track 7 : Franzy\_26
- Track 8 : King2\_26
- Track 9 : BossLady\_28
- Track 10 : Zartrosa\_28
- Track 11 : Timinator\_28, LeeroyJ\_28
- Track 12 : Shade\_28
- Track 13 : Martha\_28
- Track 14 : BigDome\_28
- Track 15 : TaeYoung\_28, Grekaycon\_28
- Track 16 : Jordan\_28, JKerns\_28
- Track 17 : Sonny\_28
- Track 18 : GravityBall\_28, BarretLemon\_28, StevieBAY\_28
- Track 19 : Pippa\_28
- Track 20 : Wyborn\_29
- Track 21 : Circuit\_27

### ***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 23 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BarretLemon\_28, Beans\_26, BigDome\_28, BossLady\_28, Brent\_26, EastWest\_29, Franzy\_26, GravityBall\_28, Grekaycon\_28, JKerns\_28, Jawnski\_26, Jordan\_28, King2\_26, LeeroyJ\_28, Martha\_28, NathanVaag\_26, Piccoletto\_26, Pippa\_28, Shade\_28, Sonny\_28, StevieBAY\_28, TaeYoung\_28, Timinator\_28, Zartrosa\_28,

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

- 

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

- Circuit\_27, Wyborn\_29,

**Summary by start number:**

Start 4:

- Found in 24 of 26 ( 92.3% ) of genes in pham
- Manual Annotations of this start: 23 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarretLemon\_28 (AO2), Beans\_26 (AO1), BigDome\_28 (AO2), BossLady\_28 (AO2), Brent\_26 (AO1), EastWest\_29 (AO), Franzy\_26 (AO1), GravityBall\_28 (AO2), Grekaycon\_28 (AO2), JKerns\_28 (AO2), Jawnski\_26 (AO1), Jordan\_28 (AO2), King2\_26 (AO1), LeeroyJ\_28 (AO2), Martha\_28 (AO2), NathanVaag\_26 (AO1), Piccoletto\_26 (AO1), Pippa\_28 (AO2), Shade\_28 (AO2), Sonny\_28 (AO2), StevieBAY\_28 (AO2), TaeYoung\_28 (AO2), Timinator\_28 (AO2), Zartrosa\_28 (AO2),

Start 5:

- Found in 2 of 26 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Circuit\_27 (FH), Wyborn\_29 (AO2),

**Summary by clusters:**

There are 4 clusters represented in this pham: FH, AO, AO2, AO1,

Info for manual annotations of cluster AO:

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

Info for manual annotations of cluster AO1:

- Start number 4 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 4 was manually annotated 15 times for cluster AO2.
- Start number 5 was manually annotated 1 time for cluster AO2.

Info for manual annotations of cluster FH:

- Start number 5 was manually annotated 1 time for cluster FH.

**Gene Information:**

Gene: BarretLemon\_28 Start: 23730, Stop: 25319, Start Num: 4

Candidate Starts for BarretLemon\_28:

(Start: 4 @23730 has 23 MA's), (7, 23760), (11, 23859), (14, 23928), (18, 24009), (20, 24036), (27, 24147), (28, 24168), (30, 24204), (45, 24426), (48, 24504), (51, 24531), (52, 24549), (55, 24615), (56, 24642), (64, 24798), (67, 24840), (73, 25044), (74, 25080), (75, 25113), (78, 25149), (79, 25221),

Gene: Beans\_26 Start: 23393, Stop: 24982, Start Num: 4

Candidate Starts for Beans\_26:

(Start: 4 @23393 has 23 MA's), (7, 23423), (20, 23699), (21, 23723), (22, 23729), (25, 23756), (28, 23831), (35, 23930), (47, 24131), (51, 24194), (54, 24260), (55, 24278), (64, 24443), (67, 24485), (71, 24596), (73, 24689), (74, 24725), (75, 24758), (79, 24869),

Gene: BigDome\_28 Start: 23719, Stop: 25311, Start Num: 4

Candidate Starts for BigDome\_28:

(Start: 4 @23719 has 23 MA's), (7, 23749), (11, 23848), (14, 23917), (18, 23998), (20, 24025), (27, 24136), (28, 24157), (30, 24193), (45, 24415), (48, 24493), (51, 24520), (52, 24538), (55, 24604), (56, 24631), (60, 24712), (61, 24721), (64, 24790), (67, 24832), (73, 25036), (74, 25072), (75, 25105), (78, 25141), (79, 25213),

Gene: BossLady\_28 Start: 23701, Stop: 25299, Start Num: 4

Candidate Starts for BossLady\_28:

(2, 23650), (3, 23656), (Start: 4 @23701 has 23 MA's), (7, 23731), (12, 23857), (15, 23908), (18, 23980), (20, 24007), (21, 24031), (22, 24037), (27, 24118), (28, 24139), (33, 24193), (35, 24238), (37, 24259), (40, 24280), (51, 24502), (52, 24520), (55, 24586), (60, 24685), (61, 24691), (62, 24736), (64, 24760), (66, 24799), (73, 25006), (74, 25042), (75, 25075), (76, 25084), (78, 25111), (79, 25186), (80, 25216),

Gene: Brent\_26 Start: 23376, Stop: 24986, Start Num: 4

Candidate Starts for Brent\_26:

(Start: 4 @23376 has 23 MA's), (6, 23391), (7, 23406), (14, 23574), (21, 23706), (22, 23712), (25, 23739), (28, 23814), (35, 23913), (47, 24114), (51, 24177), (52, 24195), (54, 24243), (55, 24261), (61, 24372), (64, 24441), (66, 24480), (71, 24594), (72, 24612), (73, 24687), (74, 24723), (75, 24756), (76, 24765), (79, 24867),

Gene: Circuit\_27 Start: 22611, Stop: 24224, Start Num: 5

Candidate Starts for Circuit\_27:

(1, 22551), (Start: 5 @22611 has 2 MA's), (9, 22719), (21, 22938), (22, 22944), (32, 23097), (38, 23181), (41, 23235), (59, 23598), (68, 23748), (75, 24003),

Gene: EastWest\_29 Start: 23578, Stop: 25173, Start Num: 4

Candidate Starts for EastWest\_29:

(Start: 4 @23578 has 23 MA's), (15, 23785), (16, 23797), (20, 23884), (23, 23917), (27, 23995), (28, 24016), (29, 24034), (36, 24133), (43, 24241), (48, 24352), (49, 24367), (50, 24376), (53, 24436), (60, 24568), (61, 24577), (62, 24622), (63, 24640), (68, 24697), (74, 24916), (81, 25093),

Gene: Franzy\_26 Start: 23375, Stop: 24985, Start Num: 4

Candidate Starts for Franzy\_26:

(Start: 4 @23375 has 23 MA's), (6, 23390), (7, 23405), (14, 23573), (21, 23705), (22, 23711), (25, 23738), (28, 23813), (35, 23912), (39, 23951), (47, 24113), (51, 24176), (52, 24194), (54, 24242), (55, 24260), (61, 24371), (64, 24440), (66, 24479), (71, 24593), (72, 24611), (73, 24686), (74, 24722), (75, 24755), (76, 24764), (79, 24866),

Gene: GravityBall\_28 Start: 23729, Stop: 25318, Start Num: 4

Candidate Starts for GravityBall\_28:

(Start: 4 @23729 has 23 MA's), (7, 23759), (11, 23858), (14, 23927), (18, 24008), (20, 24035), (27, 24146), (28, 24167), (30, 24203), (45, 24425), (48, 24503), (51, 24530), (52, 24548), (55, 24614), (56, 24641), (64, 24797), (67, 24839), (73, 25043), (74, 25079), (75, 25112), (78, 25148), (79, 25220),

Gene: Grekaycon\_28 Start: 23647, Stop: 25245, Start Num: 4

Candidate Starts for Grekaycon\_28:

(Start: 4 @23647 has 23 MA's), (7, 23677), (12, 23803), (15, 23854), (18, 23926), (20, 23953), (21, 23977), (22, 23983), (27, 24064), (28, 24085), (35, 24184), (37, 24205), (40, 24226), (51, 24448), (52, 24466), (55, 24532), (60, 24631), (61, 24637), (62, 24682), (64, 24706), (66, 24745), (73, 24952), (74, 24988), (75, 25021), (78, 25057), (79, 25132), (80, 25162),

Gene: JKerns\_28 Start: 23674, Stop: 25272, Start Num: 4

Candidate Starts for JKerns\_28:

(Start: 4 @23674 has 23 MA's), (7, 23704), (12, 23830), (15, 23881), (18, 23953), (20, 23980), (21, 24004), (22, 24010), (27, 24091), (28, 24112), (33, 24166), (35, 24211), (51, 24475), (52, 24493), (55, 24559), (60, 24658), (61, 24664), (62, 24709), (64, 24733), (66, 24772), (73, 24979), (74, 25015), (75, 25048), (76, 25057), (78, 25084), (79, 25159), (80, 25189),

Gene: Jawnski\_26 Start: 23388, Stop: 24995, Start Num: 4

Candidate Starts for Jawnski\_26:

(Start: 4 @23388 has 23 MA's), (7, 23418), (20, 23694), (21, 23718), (22, 23724), (28, 23826), (35, 23925), (47, 24126), (51, 24189), (52, 24207), (54, 24255), (55, 24273), (61, 24387), (64, 24456), (66, 24495), (71, 24609), (72, 24627), (73, 24702), (74, 24738), (75, 24771), (79, 24882), (80, 24912),

Gene: Jordan\_28 Start: 23644, Stop: 25242, Start Num: 4

Candidate Starts for Jordan\_28:

(Start: 4 @23644 has 23 MA's), (7, 23674), (12, 23800), (15, 23851), (18, 23923), (20, 23950), (21, 23974), (22, 23980), (27, 24061), (28, 24082), (33, 24136), (35, 24181), (51, 24445), (52, 24463), (55, 24529), (60, 24628), (61, 24634), (62, 24679), (64, 24703), (66, 24742), (73, 24949), (74, 24985), (75, 25018), (76, 25027), (78, 25054), (79, 25129), (80, 25159),

Gene: King2\_26 Start: 23393, Stop: 24982, Start Num: 4

Candidate Starts for King2\_26:

(Start: 4 @23393 has 23 MA's), (6, 23408), (7, 23423), (8, 23480), (12, 23549), (15, 23600), (20, 23699), (21, 23723), (22, 23729), (25, 23756), (27, 23810), (28, 23831), (35, 23930), (47, 24131), (51, 24194), (55, 24278), (64, 24443), (66, 24482), (71, 24596), (72, 24614), (73, 24689), (74, 24725), (75, 24758), (79, 24869), (80, 24899),

Gene: LeeroyJ\_28 Start: 23729, Stop: 25318, Start Num: 4

Candidate Starts for LeeroyJ\_28:

(Start: 4 @23729 has 23 MA's), (7, 23759), (11, 23858), (14, 23927), (18, 24008), (20, 24035), (27, 24146), (28, 24167), (30, 24203), (45, 24425), (46, 24449), (48, 24503), (51, 24530), (52, 24548), (55, 24614), (56, 24641), (58, 24662), (64, 24797), (67, 24839), (73, 25043), (74, 25079), (75, 25112), (78, 25148), (79, 25220),

Gene: Martha\_28 Start: 23648, Stop: 25246, Start Num: 4

Candidate Starts for Martha\_28:

(2, 23597), (Start: 4 @23648 has 23 MA's), (7, 23678), (12, 23804), (15, 23855), (18, 23927), (20, 23954), (21, 23978), (22, 23984), (27, 24065), (28, 24086), (35, 24185), (37, 24206), (40, 24227), (51, 24449), (52, 24467), (55, 24533), (60, 24632), (61, 24638), (62, 24683), (64, 24707), (66, 24746), (73, 24953), (74, 24989), (75, 25022), (78, 25058), (79, 25133), (80, 25163),

Gene: NathanVaag\_26 Start: 23369, Stop: 24958, Start Num: 4

Candidate Starts for NathanVaag\_26:

(Start: 4 @23369 has 23 MA's), (7, 23399), (21, 23699), (22, 23705), (25, 23732), (28, 23807), (35, 23906), (47, 24107), (51, 24170), (54, 24236), (55, 24254), (64, 24419), (71, 24572), (72, 24590), (73, 24665), (74, 24701), (75, 24734), (79, 24845),

Gene: Piccoletto\_26 Start: 23368, Stop: 24960, Start Num: 4

Candidate Starts for Piccoletto\_26:

(Start: 4 @23368 has 23 MA's), (7, 23398), (11, 23497), (15, 23575), (17, 23629), (19, 23671), (21, 23698), (22, 23704), (25, 23731), (28, 23806), (35, 23905), (47, 24106), (51, 24169), (52, 24187), (54, 24235), (55, 24253), (64, 24421), (66, 24460), (71, 24574), (72, 24592), (73, 24667), (74, 24703), (75, 24736), (79, 24847),

Gene: Pippa\_28 Start: 23773, Stop: 25371, Start Num: 4

Candidate Starts for Pippa\_28:

(Start: 4 @23773 has 23 MA's), (7, 23803), (12, 23929), (18, 24052), (20, 24079), (21, 24103), (22, 24109), (27, 24190), (28, 24211), (35, 24310), (37, 24331), (40, 24352), (51, 24574), (52, 24592), (55, 24658), (56, 24685), (57, 24697), (60, 24757), (61, 24763), (62, 24808), (64, 24832), (66, 24871), (73, 25078), (75, 25147), (76, 25156), (78, 25183), (79, 25258), (80, 25288),

Gene: Shade\_28 Start: 23623, Stop: 25212, Start Num: 4

Candidate Starts for Shade\_28:

(Start: 4 @23623 has 23 MA's), (6, 23638), (7, 23653), (11, 23752), (12, 23779), (15, 23830), (20, 23929), (21, 23953), (22, 23959), (27, 24040), (28, 24061), (33, 24115), (35, 24160), (44, 24298), (51, 24424), (55, 24508), (56, 24535), (64, 24673), (66, 24712), (73, 24919), (74, 24955), (75, 24988), (76, 24997), (78, 25024), (79, 25099), (80, 25129),

Gene: Sonny\_28 Start: 23644, Stop: 25242, Start Num: 4

Candidate Starts for Sonny\_28:

(Start: 4 @23644 has 23 MA's), (7, 23674), (12, 23800), (15, 23851), (18, 23923), (20, 23950), (21, 23974), (22, 23980), (27, 24061), (28, 24082), (37, 24202), (51, 24445), (52, 24463), (55, 24529), (60, 24628), (61, 24634), (62, 24679), (64, 24703), (66, 24742), (73, 24949), (74, 24985), (75, 25018), (76, 25027), (78, 25054), (79, 25129), (80, 25159),

Gene: StevieBAY\_28 Start: 23729, Stop: 25318, Start Num: 4

Candidate Starts for StevieBAY\_28:

(Start: 4 @23729 has 23 MA's), (7, 23759), (11, 23858), (14, 23927), (18, 24008), (20, 24035), (27, 24146), (28, 24167), (30, 24203), (45, 24425), (48, 24503), (51, 24530), (52, 24548), (55, 24614), (56, 24641), (64, 24797), (67, 24839), (73, 25043), (74, 25079), (75, 25112), (78, 25148), (79, 25220),

Gene: TaeYoung\_28 Start: 23648, Stop: 25246, Start Num: 4

Candidate Starts for TaeYoung\_28:

(Start: 4 @23648 has 23 MA's), (7, 23678), (12, 23804), (15, 23855), (18, 23927), (20, 23954), (21, 23978), (22, 23984), (27, 24065), (28, 24086), (35, 24185), (37, 24206), (40, 24227), (51, 24449), (52, 24467), (55, 24533), (60, 24632), (61, 24638), (62, 24683), (64, 24707), (66, 24746), (73, 24953), (74, 24989), (75, 25022), (78, 25058), (79, 25133), (80, 25163),

Gene: Timinator\_28 Start: 23729, Stop: 25318, Start Num: 4

Candidate Starts for Timinator\_28:

(Start: 4 @23729 has 23 MA's), (7, 23759), (11, 23858), (14, 23927), (18, 24008), (20, 24035), (27, 24146), (28, 24167), (30, 24203), (45, 24425), (46, 24449), (48, 24503), (51, 24530), (52, 24548), (55, 24614), (56, 24641), (58, 24662), (64, 24797), (67, 24839), (73, 25043), (74, 25079), (75, 25112), (78, 25148), (79, 25220),

Gene: Wyborn\_29 Start: 23980, Stop: 25587, Start Num: 5

Candidate Starts for Wyborn\_29:

(Start: 5 @23980 has 2 MA's), (10, 24091), (11, 24103), (12, 24130), (13, 24133), (14, 24172), (15, 24181), (20, 24283), (21, 24307), (23, 24316), (24, 24334), (28, 24415), (31, 24454), (33, 24469), (34, 24481), (35, 24514), (36, 24532), (39, 24553), (42, 24580), (48, 24754), (50, 24778), (53, 24838), (60, 24967), (63, 25030), (64, 25036), (65, 25051), (69, 25138), (70, 25186), (72, 25207), (73, 25282), (74,

25318), (77, 25381), (78, 25387), (79, 25462), (81, 25495), (82, 25522),

Gene: Zartrosa\_28 Start: 23647, Stop: 25236, Start Num: 4

Candidate Starts for Zartrosa\_28:

(Start: 4 @23647 has 23 MA's), (7, 23677), (11, 23776), (12, 23803), (15, 23854), (20, 23953), (21, 23977), (22, 23983), (26, 24031), (27, 24064), (28, 24085), (33, 24139), (35, 24184), (44, 24322), (51, 24448), (55, 24532), (56, 24559), (64, 24697), (66, 24736), (73, 24943), (74, 24979), (75, 25012), (76, 25021), (78, 25048), (79, 25123), (80, 25153),