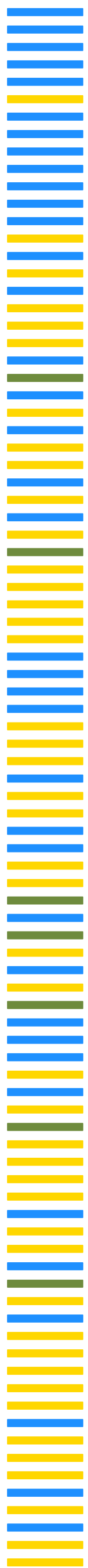


XCV3015  
 XCV0334  
 XCV1072  
 XCV2964  
 XCV0812  
 XCV2147  
 XCV0784  
 XCV3611  
 XCV2309  
 XCV4116  
 XCV3365  
 XCV0887  
 XCV1253  
 XCV1917  
 XCV0232  
 XCV2660\_2  
 XCV2672  
 XCV1329  
 XCV3793  
 XCV1919  
 XCV2671\_2  
 XCV1332\_3  
 XCV0528  
 XCV3804  
 XCV2215  
 XCV3232  
 XCV1174  
 XCV1957  
 XCV1324\_1  
 XCV4068  
 XCV3233  
 XCV0745  
 XCV3168  
 XCV3167  
 XCV3166  
 XCV3165  
 XCV2017  
 XCV0115  
 XCV2187  
 XCV1261  
 XCV4086  
 XCV3025  
 XCV1930  
 XCV3023  
 XCV0192  
 XCV3951\_1  
 XCV3571  
 XCV0933  
 XCV0529  
 XCV3229  
 XCV2090  
 XCV0746\_1  
 XCV1827  
 XCV1332\_1  
 XCV3850  
 XCV2216  
 XCV3601  
 XCV0746\_2  
 XCV3351  
 XCV2104  
 XCV2039  
 XCV3852  
 XCV0934  
 XCV1380  
 XCV1332\_2  
 XCV2660\_1  
 XCV2595  
 XCV1314  
 XCV4292  
 XCV2671\_1  
 XCV2034  
 XCV1976  
 XCV3266  
 XCV1334  
 XCV3951\_2  
 XCV3760  
 XCV3257  
 XCV1708  
 XCV1324\_2  
 XCV1705  
 XCV1706  
 XCV2153  
 XCV2015  
 XCV2422  
 XCV1654  
 XCV3839  
 XCV0678  
 XCV2112  
 XCV4276  
 XCV3608



Orphan  
 Pair  
 Triad  
 Tetrad  
 Pentad+

**Cluster**

OmpR  
 OmpR  
 OmpR  
 OmpR  
 OmpR  
 OmpR  
 OmpR  
 OmpR  
 OmpR  
 OmpR  
 OmpR  
 OmpR  
 RpfG  
 NtrC  
 PleD  
 RpfG  
 Hybrid  
 Hybrid  
 Unorthodox  
 Unorthodox  
 Hybrid  
 Unorthodox  
 Hybrid  
 Hybrid  
 CheY  
 CheY  
 CheY  
 Hybrid  
 OmpR  
 CheY  
 CheY  
 Hybrid  
 Hybrid  
 Hybrid  
 Hybrid  
 NarL  
 NarL  
 NarL  
 NarL  
 NarL  
 CheB  
 CheB  
 VieA  
 NtrC  
 FrzZ  
 RpfG  
 CheY  
 VieA  
 CheA  
 AmiR\_NasR  
 Hybrid  
 PrrA  
 Hybrid  
 unclassified  
 unclassified  
 Hybrid  
 Hybrid  
 NtrC  
 NarL  
 PleD\_VieA  
 NtrC  
 Hybrid  
 unclassified  
 Hybrid  
 PleD  
 PleD\_VieA  
 OmpR  
 Hybrid  
 Unorthodox  
 CheV  
 CheY  
 CheY  
 CheY  
 FrzZ  
 NtrC  
 CheY  
 Hybrid  
 Hybrid  
 Hybrid  
 CheY  
 NarL  
 CheY  
 NarL  
 NarL  
 NarL  
 LytTR  
 LytTR  
 LytTR  
 LytTR  
 NarL  
 NarL

**Family**

1 Response\_reg,1 Trans\_reg\_C  
 1 Response\_reg,1 Trans\_reg\_C  
 1 Response\_reg,1 Trans\_reg\_C  
 1 Response\_reg,1 Trans\_reg\_C  
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 1 Response\_reg,1 Trans\_reg\_C  
 1 Response\_reg,1 Trans\_reg\_C  
 1 Response\_reg,1 Trans\_reg\_C  
 1 Response\_reg,1 HD  
 1 Response\_reg,1 AAA\_5,1 HTH\_8  
 2 Response\_reg,1 GGDEF  
 1 Response\_reg,1 HD  
 1 Response\_reg,1 HisKA,1 HATPase\_c  
 1 HisKA,1 HATPase\_c,1 Response\_reg  
 1 HisKA,1 HATPase\_c,1 Response\_reg,1 Hpt  
 1 CHASE,1 PAS\_4,1 PAS,1 HisKA,1 HATPase\_c,2 Response\_reg,1 Hpt  
 1 GAF,1 HisKA,1 HATPase\_c,3 Response\_reg  
 1 HisKA,1 HATPase\_c,1 Response\_reg,1 Hpt  
 2 PAS\_4,1 HisKA,1 HATPase\_c,1 Response\_reg  
 2 GAF,2 PAS\_3,1 HisKA,1 HATPase\_c,1 Response\_reg  
 1 Response\_reg  
 1 Response\_reg  
 1 Response\_reg  
 2 Response\_reg,1 PAS\_4,1 HisKA,1 HATPase\_c  
 1 Response\_reg,1 Trans\_reg\_C  
 1 Response\_reg  
 1 Response\_reg  
 1 HisKA,1 HATPase\_c,1 Response\_reg  
 1 HisKA,1 HATPase\_c,1 Response\_reg  
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 1 Response\_reg,1 HTH\_LUXR  
 1 Response\_reg,1 HTH\_LUXR  
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 1 Response\_reg,1 CheB\_methylest  
 1 Response\_reg,1 CheB\_methylest  
 1 Response\_reg,1 EAL  
 1 Response\_reg,1 AAA\_5,1 HTH\_8  
 2 Response\_reg  
 1 Response\_reg,1 HDOD  
 1 Response\_reg  
 1 Response\_reg,1 EAL  
 4 Hpt,1 H-kinase\_dim,1 HATPase\_c,1 CheW,1 Response\_reg  
 1 Response\_reg,1 ANTAR  
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 1 Response\_reg,1 HTH\_8  
 1 GAF,1 HisKA,1 HATPase\_c,3 Response\_reg  
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 1 REC  
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 1 GGDEF,1 EAL,1 Response\_reg  
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 1 CHASE,1 PAS\_4,1 PAS,1 HisKA,1 HATPase\_c,2 Response\_reg,1 Hpt  
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 1 Response\_reg,1 HTH\_LUXR  
 1 Response\_reg,1 HTH\_LUXR  
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 1 Response\_reg,1 LytTR  
 1 Response\_reg,1 LytTR  
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 1 Response\_reg,1 HTH\_LUXR  
 1 Response\_reg,1 HTH\_LUXR