

**PF10 0348 (msp3/6-like)**

*P.reichenowi* [TED-----]  
3D7 TED-----TDDTEDTED  
Kilifi isolate TEDTED---TDDTEDTED  
Kilifi isolate TED---TDDTDDTEDTED  
Kilifi isolate TED-----TED  
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**PF10 0355 (msp3/6-like)**

*P.reichenowi* [TEEEIKEDIEEE-----TEEEETEE-----]  
3D7 TEEI IKEDIEEETEEDIEEETEETEETEE-----  
Kilifi isolate TEEI IKEDIEEETEEDIEEETEETEETEETEE-----  
Kilifi isolate TDEEIKEDIEEETEEDIEEETEETEETEE  
Kilifi isolate TEEI KEDMEEETEEDIEEETEETEETEE-----  
Kilifi isolate TEEI IKEDIEEETEEDIEEKEEETEETEETEE  
Kilifi isolate TEEI IKEDIEEETEEDIEEETEETEETEETEE-----  
Kilifi isolate TEEI IKEDIEEETEEDIEEETEETEETEETEETEE  
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**PF07 0004 Repeat block 1**

*P.reichenowi* [EY-----ELEVELHEDKEEKIEDI]  
3D7 EYEEIEVEVDEDEDEDE--EVEYVEIEVDEDEEIEYEIIEVEVDDDDDD--EDVEYEVIEIEVDDDEEVELLEDKEEKIEEV  
Kilifi isolate EYEEIEVEVDEDEDEDE--EVEYVEIEVDEDEEIEYEIIEVEVDDDDDD--EDVEYEVIEIEVDDDEEVELLEDKAEKIEEV  
Kilifi isolate EYEEIEVEVDEDEDE----EVEYVEIEVDEDEEIEYEIIEVELDDDDDD--EDVEYEVIEIEVDDDEEVELLEDKEEKIEEV  
Kilifi isolate EYEEIEVEVDEDE-----EVEYVEIEVDEDEEIEYEIIEVELDDDDDD--EDVEYEVIEIEVDDDEEVELLEDKEEKIEEV  
Kilifi isolate EYEEIEVEVDEDEDE----EVEYVEIEVDDDEEIEYEIIEVEVDDDDDDDEDVEYEVIEIEVDDDEEVELLEDKEEKIEEV  
Kilifi isolate EYEEIEVEVDEDEDEDEDEEVEYVEIEVDDDEEIEYEIIEVEVDDDDDD--EDVEYEVIEIEVDDDEEVELLEDKEEKIEEV  
Kilifi isolate EYEEIEVEVDEDEDE----EVEYVEIEVDEDEEIEYEIIEVELNDDDD--EDVEYEVIEIEVDDDEEVELLEDKEEKIEEV  
Kilifi isolate EYEEIEVEVD-----DDEEVELLEDKEEKIEEV  
Kilifi isolate EYEEIEVEVDEDEDEDE--EVEYVEIEVDEDEEIEYEIIEVELDDDDDD--EDVEYEVIEIEVDDDEEVELLEDKEEKIEEV  
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**PF07 0004 Repeat block 2a**

*P.reichenowi* [DPFKKNDIKSYDPFKRDMIKPEDNLRREESKSYDPFKRDMIKPGDNLRREESKSYDPFKR]  
3D7 DPLKKNEIKSYDPFKRDTIKAQDNLNGNERKAYDPFKKDMVKPEDNLRKEESKTYDTLKR  
Kilifi isolate EPLKKNEIKSYDPFKRDTIKAQENLNGVERKEYDPFKKDMVKPEDNLRKEESKTYDTLKR  
Kilifi isolate DPLKKNEIKSYDPFKRDTIKAQENFNGVERKEYDPFKKDMVKPEDNLRKEESKTYDTLKR  
Kilifi isolate EPLKKNEIKSYDPFKRDTIKAQENLNGVERKSYDPFKRDVTQPQDNLRREESKTYDPLKR  
Kilifi isolate EPLKKNEIKSYDPFKRDTIKAQENLNGVERKEYDPFKKDIVKPEDNLRKEESKTYDTLKR  
Kilifi isolate DPLKK-EIKSYDPFKRDTIKAQDNLNGNERKAYDPFKKDMVKPEDNLRKEESKTYDTLKR  
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**PF07 0004 Repeat block 2b**

*P.reichenowi* [-----DMIKPEDNLRREESKSYDPLKRDVTQTKDNLKSEE ]  
3D7 NVTQMQDNLKREESKTYDTLKRNVVTQMQDNLKREERKPYDPLKRDATQTQDNLRREE  
Kilifi isolate -----NVTQMQDNLKREERKPYDPLKRDATQTQDNLRREE  
Kilifi isolate NVTQTQDNLRREESKTYDPLKRNVVTQMQDNLKREERKPYDPLKRDATQTQDNLRREE  
Kilifi isolate -----NVTQMQDNLKREESKTYDTLKRNVVTQMQDNLKREE  
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**PF07 0004 Repeat block 2c**

*P.reichenowi* [-----]  
3D7 -----GKPYDPLKRDVTKAQD-----  
Kilifi isolate -----  
Kilifi isolate -----RKPYPDKRDATQTQD-----  
Kilifi isolate -----RKPYPDKRDATQTQDNLRREEGKPYDPLKRDVTKAQD  
Kilifi isolate GKPYDPLKRDATQTQDNLRREEGKPYDPLKRDVTKAQD-----  
Kilifi isolate RKPYPDKRDATQTQDNLRREEGKPYDPLKRDVTKAQDNLRREEGKPYDPLKRDVTKAQD  
Kilifi isolate -----GKPYDPLKRDVTKAQDNLKSEEIKIQDTFKADAIKTQD  
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**PF07 0004 Repeat block 2d**

*P.reichenowi* [-----]  
3D7 NLKSEEIKIQDTFKADAIAKTQDILKSEEIKIRDTFKADAIAKTQDNLKSEEIKIQDTFKADAIAKTQDILKREEIIIQDTFKTDVVKAQ  
Kilifi isolate NLKREEIKIQDTFKADAIAKRQDILKSEEIKIRDTFKADAIAKTQDNLKSEEIKIQDTFKADAIAKTQDILKREEIIIQDTFKTDVVKAQ  
Kilifi isolate -----IKIQDTFKADAIAKRQDILKSEEIKIRDTFKADAIAKTQDNLKSEEIKIQDTFKADAIAKTQDILKREEIIIQDTFKADAIAKTQ  
Kilifi isolate -----NLKSEEIKIQDTFKADAIAKTQDILKREEIIIQDTFKADVVKQAQ  
Kilifi isolate NLKREEIKIQDTFKADAIAKRQDILKSEEIKIRDTFKADAIAKTQDNLKSEEIKTQ-----DILKREEIIIQDTFKTDVVKAQ  
Kilifi isolate NLKREEIKIQDTFKADAIAKRQDILKSEEIKIRDTFKADAIAKTQDNLKSEEIKIQDTFKADAIAKTQDILK-----  
Kilifi isolate NLKSEEIKIQDTFKADAIAKTQDILKSEEIKIRDTFKADAIAKTQDNLKSEEIKIQD-----TFKTDVVKAQ  
Kilifi isolate ILKSEEIKIRDTFKADAIAKTQDNLKSEEIKIQDTFKADAIAKTQDILKREEIIIQDTFKTDVVKAQ-----  
Kilifi isolate NLKREEIKIQDTFKADAIAKRQDILKSEEIKIRDTFKADAIAKTQDNLKSEEIKIQDTFKADAIAKTQDIL-----TDVVKAQ  
Kilifi isolate NLKREEIKIQDTFKADAIAKRQDILKSEEIKIRDTFKADAIAKTQDNLKSEEIKIQDTFKADAIAKTQDILKREEIIIQDTFKTDVVKAQ

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**PF07 0004 Repeat block 3**

*P.reichenowi* [DNLGRDKIIVQAIQIFKKEEGKLTDAKKEKVKQ-----]  
3D7 DNLGRDRIIVKDTFKKKEIKSQDHLKREEIKQKDILKENEVKKIDPLKKEEAKPTDLLKKEEAKPKDPLKKEEVKPSDTLKKEVKPT  
Kilifi isolate DNLERDRIIVKDTFKKKEIKSQDNLKREEIKQKDILKENEVKKIDPLKKEESKPTDLLKKEETKPKDPLKKEEVKPSDTLKKEVKPT  
Kilifi isolate DNLERDRIIVKDTFKKKEIKSQDNLKREEIKQKDILKENEVKKIDPLKKEESKPTDLLKKEETKPKDPLKKEEVKPSDTLKKEVKPP  
Kilifi isolate DNLERDRIIVKDTFKKKEIKSQDHLKREEIKQKDILKENEVKKIDPLKKEE-----VKPSDTLKKEVKPP  
Kilifi isolate DNLGRDRIIVKDTFKKKEIKSQDHLKREEIKQKDILKENEVKKIDPLKK-----  
Kilifi isolate DNLERDRIIVKDTFKKKEIKSQDNLKREEIKQKDILKENEVKKIDP-----KKEEVKPSDTLKKEVKPT  
Kilifi isolate DNLERDRIIVKDTFKKKEIKSQDNLKREEIKQKDILKENEVKKIDPLKKEESKPTDLLKKEETKPKDPLKKEEVKPLDTLKKEVKPP

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**PF07 0004 Repeat block 3b**

*P.reichenowi* [-----SDLLKEKRKPK]  
3D7 -----NLLKKEVKPTNLLKKEEAKPTDLLKEERKTK  
Kilifi isolate -----DTLLKKEVKPTNLLKKEEAKPTDLLKEERKTK  
Kilifi isolate -----  
Kilifi isolate NLLKKEVKPTNLLKKEVKPTNLLKKEEAKPTDLLKEERKTK

**PF07 0004 Repeat block 4**

*P.reichenowi* [KASQKYIQKKQ-----LEQNIQNKAP-----LQNTVSKYSVQN---]  
3D7 KAPQNNVQNKPRQNIQNQHEKNVQSKAPQQNIQN RAPQKNKQNNTPVQNTISKSQVQNRVN  
Kilifi isolate KAPQNNVQNKQPQQNKQNHQKNVQNKAPQQNIQN RAPQKNKQNNTPGQNTISKSQVQNRVN  
Kilifi isolate KAPQNNVQNKQPQQNVRNQHQKNVQNKALQQNIQNRLPQHNIQN RAPQQNKQNNTPVQNTIS  
Kilifi isolate KAPQNNVQNKPRQNIQNQHEKNVQSKAPQQNIQN RAPQKNKQNNTPVQNTISKSQVQN---  
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