

Sequence Name < Pos = 378

Sequence Name	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540
Consensus	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAATA--TGATGCAGT---AA-GAAAT-A-----TAAGGCTAAGATAT-GTACATTAAGTTGAAATGATG-TG--TATCAACTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
31 Sequences	380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540																
Pknowlesi.seq	ACCACATCTAAGGAAGGCAGCAGGCGCG---TAAATTACCCAA-TTCTAAGAAGAGAGGTAGTGACAA-GAAATAACA-AT-ACAAGGCCAA-TC-T-GGCTTTGTAATTGGAATGATGGGAATTTAAACCTTCCCAAAT-CAATTGGAGGGCAAGTCTGGT																
Pmalariae.seq	ACCACATCTAAGGAAGGCAGCAGGCGCG---TAAATTACCCAA-TTCTAAGAAGAGAGGTAGTGACAA-GAAATAACA-AT-GCAAGGCCAAATTTT-GTTTTGCAATTGGAATGATGGGAATTTAAACCTTCCCAAGG-CAATTGGAGGGCAAGTCTGGT																
Povale.seq	ACCACATCTAAGGAAGGCAGCAGGCGCG---TAAATTACCCAA-TTCTAAGAAGAGAGGTAGTGACAA-GAAATAACA-AT-ACAAGGCCATTTTCAT-GTTTTGTAATTGGAATGATGGGAATTTAAACCTTCCCAAAT-CAATTGGAGGGCAAGTCTGGT																
Pyoelii.seq	ACCACATCTAAGGAAGGCAGCAGGCGCG---TAAATTACCCAAATCTAAATAAGAGAGGTAGTGACAA-GAAATAACA-AT-ATAAGGCCAAAT-T-TGGTTTATAATTGGAATGATGGGAATTTAAACCTTCCCAAAT-CAATTGGAGGGCAAGTCTGGT																
Slide 52_clone1.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAATA--TGTTGCAGTTA-AAACG-----GGAGTTTAAGGCAA-CAACAGGGGCTTTAAAT---TG--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 53_clone1.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTACTTC--CAAGCCGAAGAAAGCAAAG-----TCCTTACTTCCAAGCCGAAGCAAAGAAAGTCCTTACTTC--CAA-GCCGAAGCA---ATACCTCCAGCTGTTTGACAATCACTAGT																
Slide 53_clone2.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAAT--TGTTG-----GAGTTTAAGGCAA-CAACAGGAGCGTTAAAT---TG--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGC																
Slide 55_clone1.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAGAAC--TTAGATA-----C-----CCAGGTAA-TTGATCGGCTTGGAGG-----TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 56_clone1.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTA-----AATCG-----GTGACGTAG-GCACAGTCGTTTTACACGTCGTG--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 61_clone1.seq	-----CG---CTTCTAGCTTAA--TCCACATAACTGATACTTCGTATC-GACTTTGTGCGC-ATTTTGCTATTATGT-GTTCTTTTAAATTAATGATTCTTTTAAAGGACTTTCTTTGCTTC-GGCTTGGAAAT																
Slide 61_clone2.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAATCGGTGACGTA-----TCAGCTAT-GTGGATTAAGCTAGAAG---G--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 64_clone1.seq	-----CG---CTTCTAGCTTAA--TCCACATAACTGATAACCCT-----GTTGTTGC-----CTTAAACTCT-T-GCGTTTTAA-CTGCAACAATTTT---AAGGACTTTCTTTGCTTC-GGCTTGGAAAT																
Slide 64_clone2.seq	-----GATTCTG---CTTCTAGCTTAA--TCCACATAACTGATAC-----GACGTTG-----TAAACGAC-T-GTGCT--A-CGTACCCGATTT---AAGGACTTTCTTTGCTTC-GGCTTGGAAATCACTAGT																
Slide 64_clone3.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAAT--TGTTGCAGTTA-AAACG-----GAGTTTAAGGCAA-CAACAGGAGGTTTAAAT---TG--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 70_clone1.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTA-----AATCG-----GTGACGTAG-GCACAGTCGTTTTAA-----G--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 70_clone2.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAAC--TGTTGCAGTTA-AAACGTA-----AGGAGTTAAGGCAA-CTACAGGAGCTTTAAAT---TG--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 71_clone1.seq	-----CGATTCG---CTTCTAGCTTAA--TCCACATAACTGATACC-----TTA-----GATACCCT-G-GTAATTTGATCGGCTTGGAAAT---AAGGACTTTCTTTGCTTC-GGCTTGGAAATCACTAGT																
Slide 71_clone2.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAATCGGTGACGTAGGCACAGTCGTTTTACACGTCGTGCGTATCAGTTAT-GTGGATTAAGCTAGAAGCG---G--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 71_clone3.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAGAATA-TCAGGCAG-----TATCAGTTAT-GTGGATTAAGCTAGAAGCG---G--TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 72_clone1.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAGAAC--TTAGATA-----C-----CCAGGTAA-TTGATCGGCTTGGAGG-----TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
Slide 72_clone2.seq	-----GATTCG---CTTCTAGCTTAA--TCCACATAACTGATACCAC-----GACGTTG-----TAAACGAC-T-GTGCT--A-CGTACCCGATTT---AAGGACTTTCTTTGCTTC-GGCTTGGAAATCACTAGT																
Slide 83_clone1.seq	-----GATTCG---CTTCTAGCTTAA--TCCACATAACTGATACTTCGTATC-GACTTTGTGCGC-ATTTTGCTATTATGT-GTTCTTTTAAATTAATGATTCTTTTAAAGGACTTTCTTTGCTTC-GGCTTGGAAATCACTAGT																
Slide 86_clone1.seq	-----GATTACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAGTCC--T--TA-----AATCG-----GTGACGTAG-GCACAGTCATTTTACACGTCGTGG-TATCAGTTA--TGTGGATTAAGCTAGAAGCGAATCACTAGT																
SlideBrazil.seq	-----ACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAAAA---GAATCATTTTAAATTAAGAAGCACATAATAG---CAAAATGC-GCACA--AAGTCGATACGAAGTATC-AGTTA-----TGTGGATTAAGCTAGAAGCG																
18S PVX_079693.seq	TTTCAAAGAATCGATATTTAAGCAACG---CTTCTAGCTTAA--TCCACATAACTGATACTTCGTATC-GACTTTGTGCGC-ATTTTGCTATTATGT-GTTCTTTTAAATTAATGATTCTTTTAAAGGACTTTCTTTGCTTC-GGCTTGGAAAT																
18S PVX_088859.seq	-----AGTAACAAAATCTTCCATATGGTT--AAGGTAAAGAAGATTTTAAAAA---GAAACACTTTAATTAAAAAAACGCTTGATAGG--TAGGATGC-GCACAG-AAGCCGAAACCGTGATTG-GCTCAACCCCTTGTGGATCTAGTAACGGCG--TTATT																
18S PVX_096002.seq	-----AGTAACAAGGACTTCCATGCCG---AAGCAAAGAAAGTCCTTAAAAA---GAATCATTTTAAATTAAGAAGCACATAATAG---CAAAATGC-GCACA--AAGTCGATACGAAGTATC-AGTTA-----TGTGGATTAAGCTAGAAGCG--TTGCTT																
18S PVX_097020.seq	-----AGTAACAAGGACTTCCAAGCCG---AAGCAAAGAAAGTCCTTAAAAA---GAATCATTTTAAATTAAGAAGCACATAATAG---CAAAATGC-GCACA--AAGTCGATACGAAGTATC-AGTTA-----TGTGGATTAAGCTAGAAGCG--TTGCTT																
Pberghei.seq	GATATTTTCAATGATACAACAAATATAGGAAATGTGTGTACAAGCTTCACATA-CAAATATAT---A---AGACAAGCCATTTTGCAATTAATATTTTATTTTAAATTTATCTTTTTTATAGCAAAAAAAA---ATAAATAACATAAGAAAAATATATTAAC																
Pcynomolgi.seq	ACCACATCTAAGGAAGGCAGCAGGCGCG---TAAATTACCCAA-TTCTAAGAAGAGAGGTAGTGACAA-GAAATAACA-AT-ACAAGGCCAA-TC-T-GGCTTTGTAATTGGAATGATGGGAATTTAAACCTTCCCAAAT-CAATTGGAGGGCAAGTCTGGT																
Pfalciparum.seq	ACCACATCTAAGGAAGGCAGCAGGCGCG---TAAATTACCCAA-TTCTAAGAAGAGAGGTAGTGACAA-GAAATAACA-AT-GCAAGGCCAAATTTT-GTTTTGTAATTGGAATGGTGGGAATTTAAACCTTCCCAAGTAAACAATTGGAGGGCAAGTCTGGT																