

Signature Sequences Ffh Protein

Griffiths, E. and Gupta, R.S. (2004) J. Bact. 186:3097-3107

| | | 215 | 265 |
|---|-------------------------------|---|--|
| Proteobacteria | <i>E. coli</i> | NP_417101 | LGMGDVLSLIEDIESKVDRAQAEKLSKLLKKGDFDLNDFLEQLRQMKNMG |
| | <i>Sal. typhimurium</i> | NP_461607 | -----T-----K----- |
| | <i>H. influenzae</i> | NP_438280 | -----L-RS---EK---M-Q-F---D-T-D-R---E-K-- |
| | <i>Buch. aphidicola</i> | NP_240210 | ---N-IM-----E---QS-IQ--TK-----HD-N-----T-IK---KI- |
| | <i>Pas. multocida</i> | NP_246120 | -----L-RS---EK---M-Q-F---N-T-E-R---I----- |
| | <i>V. cholerae</i> | NP_230211 | -----LQRN--QEK-----K-F-EKK---E-R---G----- |
| | <i>Nit. fastidiosa</i> | NP_297366 | -D-----V-QV-QA--QEKTA---A-VA--KK-N---MK---E--Q--- |
| | <i>Pse. aeruginosa</i> | NP_252435 | -----QA-QNL--DK-----K-I---K---E-RD--Q----- |
| | <i>Ral. solanacearum</i> | NP_520932 | ----I-A-V-EAQRG--ME--Q---A-I--TG---E--KA-IG--K-- |
| | <i>Nei. meningitidis</i> | NP_273349 | -----T-----VQKGI-EEA-A-M-K--H--K-----K--IQ--R-- |
| | <i>Nit. europaea</i> | NP_841501 | ---G---G---EAQRTS-QKE--R-MK-M-S-KS-----QQ-FQ--K-- |
| | <i>Rh. sphaeroides</i> | ZP_00006756 | ----I-VA-V-KAQETFEAE--A-MMKRFQ--L-NM--LKM--E--LK-- |
| | <i>Rhodo. rubrum</i> | ZP_00016149 | -----VA-V-KAAETIEMD---RV-KRMME-K---E-MLA-I--I-K-- |
| | <i>A. tumefaciens</i> | NP_355632 | -----IV--V-KAAENI-AEK-RSM-E-MA--K-----LAD--G---K-- |
| | <i>R. prowazekii</i> | NP_220563 | -D---II-FVKKAA-I---EE---T-I---S-K-----Y-Q-M-SI-K-- |
| | <i>C. crescentus</i> | NP_422447 | --Q---VA-V-KA AADLDQAEERMA-KLAKGK---D-LAA-----QK-- |
| | <i>Hel. pylori</i> | NP_207943 | M-A--IV--A-KTA-VLNPNE-KD-SK----Q-TF---N-IEKV-KL- |
| | <i>Geo. metallireducens</i> | ZP_00081709 | -----I-T-V-KAQATF-ATET-R-QQ---SQ---E--RS--Q-I-K-- |
| | <i>Des. desulfuricans</i> | ZP_00130373 | -----T---KAQTTIKEEE--E-GR-MQRAE--FE--RT-M-R-RKL- |
| | <i>Camp. jejuni</i> | NP_281881 | M-E--LAT-A-KTAAII-EKE-K--NQ-I---E-NF---N-MESI-KL- |
| Aquifex, Chlamydiae, CFBG | <i>Aqu. aeolicus</i> | NP_214181 | --L--IQ--V-KAQEVITEDK-QVM-T-VMT-E--E-LR-M--MIQQ-- |
| | <i>Cyt. hutchinsonii</i> | ZP_00119217 | -----V--V-RAQQVF-EEETK--NQ--R-NQ--NFE---N-IQ-I-K-- |
| | <i>Bact. thetaiotaomicron</i> | NP_810514 | -----IV--V-RAQEY-EEE-KR-QK-IA-NQ--F---S-IA-I-K-- |
| | <i>Cb. tepidum</i> | NP_662058 | -----IV-FV-KAQEAL-LEKTMAMQ---M-NE---D-FD--Q-L-K-- |
| | <i>Chlam.pneumoniae</i> | AAP98049 | ----DTINFVKEMREYISEEEDAE-GK--VTA A-TYE-YYK-MKAFRR-- |
| | <i>Chl. muridarum</i> | NP_296673 | -----TI--VDKMREC-SEENKE-EE--T-AT--TYE--YK-M-AFRRL- |
| | <i>Chl. trachomatis</i> | NP_219527 | -----TI--VDKMRECISEEENKE-EE--T-AT--TYE--HK-ILAFRRL- |
| | <i>Bor. burgdorferi</i> | NP_212828 | -----V--V-KVQ-V--KEE-I--EE-IN-AS--FT--Y-S-F-RIRQV- |
| | <i>Tre. pallidum</i> | NP_218856 | -----IV--V-KAQKAF-AQE HARAQK-TQSHER-T-S-M-DH-QTIEK-- |
| | <i>Nostoc sp. PCC 7120</i> | NP_485992 | -----T-V-KAQEEF-L-D---MQE-ILSAK--FT--VK--ML---- |
| Spirochetes. Cyanobacteria, GNS Bacteria | <i>Pro. marinus</i> | NP_894182 | -----T-V-KAQKE-EL--V--MQK--QEA S--FS---Q-M-LI-R-- |
| | <i>Tri. erythraeum</i> | ZP_00071675 | -----T-V-KAQEEF-I-D---MQE-ILSAK--FT--K-T-L----- |
| | <i>Sy. sp. PCC 6803</i> | NP_441626 | -N-----T-V-KAQEAI-VGDV---QN-ILEAT--FD--IK-M-F----- |
| | <i>Thermosyn. elongatus</i> | NP_682763 | -----T-V-KAQEE--L-D---MSR-ILEAQ--FD--K---LL---- |
| | <i>Cfx. aurantiacus</i> | ZP_00017969 | -----RA-QLY-AE--K-MQKR-S--E--FE--NS-H--RKL- |
| | <i>D. grandis *</i> | AY453858 | -----G---RAQAADLK-MEV-K P--E-L-L-----LRKL- |
| | <i>D. radiodurans</i> | NP_295559 | -----G---RAQAADLK-MEV-K P--E-L-L-----LRKL- |
| | <i>The. aquaticus</i> | AAB58502 | -----A--A-KVRAAGLE-E-P-SAKE LS-E--K-MQNL-RL- |
| | <i>T. maritima</i> | NP_229365 | -----KV-KEL-QEKMK-S-E-FL-AE--T-E--K---QE--KL- |
| | <i>Cor. glutamicum</i> | NP_601261 | -----QA-AVM-QEK--VA-Q--GS-E LT-E--D-MLMIRR-- |
| Deinococcus/ Thermus | <i>Bif. longum</i> | NP_695507 | -D---IMT---QAQKQF-EEE-R-A-E-ISE-S--G-D---D--Q-VRKL- |
| | <i>Thermobif. fusca</i> | ZP_00059090 | -D---T---QAQRTFEEEEVA-M--T-ASDED-T-E-----MMIRKL- |
| | <i>Myc. tuberculosis</i> | NP_337496 | -----QA-QVF-AQ---EA-A-IGA-E LT-E-----MLAVR-- |
| | <i>Str. avermitilis</i> | NP_823824 | -D---L-T---QA-KTFSQEE---M---ASKK GQDFTLDDF-S--EQVR |
| | <i>Str. coelicolor</i> | NP_629720 | -D---L-T---QA-KTFSQEE---M---ASKK GQDFTLDDF-A--EQVR |
| | <i>Thermo. tengcongensis</i> | NP_623080 | -----T---KAQAAI-EKK-LEMGQ-ILSKQ--T-E-----SL---- |
| | <i>Lis. innocua</i> | NP_471249 | -----KAQTD--AEKMKAMEQ-M-DNS MT-D---D--Q-V-Q-- |
| | <i>Sta. aureus</i> | NP_645937 | -----KAQQD--QEK-KD-EK-MRETS--T-D-----D-V--L- |
| | <i>Bac. subtilis</i> | NP_389480 | -----T---KAQAS--EDK-KE-EQ-MRTMS--T-D-----VR--- |
| | <i>Strep. pyogenes</i> | NP_802303 | ----L-T---KASQEY-EKKSLE--E-MRENT--F---I---D-VQ--- |
| | <i>Oce. iheyensis</i> | NP_692452 | -----KAQTN--EK--KE-EE-MRTMS--TFD-----MG-V-Q-- |
| | <i>Clo. acetobutylicum</i> | NP_348380 | -----T---KAQ-AI-EK--KE-GDRMLSQE--NFD--QAFA--KL- |
| | <i>M. genitalium</i> | NP_072708 | --L---M--V-KA-QVF-KKDLT-TI--MFL-K M--E-L-IYMQ--HK-- |
| | <i>M. pneumoniae</i> | NP_109749 | --L---MT--V-KA-EVF-KQSLT-TV--MFL-K M--E-L-LYME--NQ-- |
| | <i>Fuso. nucleatum</i> | NP_604287 | -----V--V-KAQEVI-ENE-KS-EE-I-SQK-----K--QTI-RL- |
| <i>L. lactis</i> | NP_267772 | ----M-T---KAQANY-EE-SA---E-MAENR--YE--V---D-VT--- | |