

A

PilG_{Xcc} (1) MTENMAAGGELAGLKVMVIDDSKTIRRTAETLLKREGCEVVTATDGFEALAKIADQQPQIIFVDIMMPRLD
 PilG_{Pa} (1) -----MVIDDSKTIRRTAETLLKREGCEVVTADGFEALAKIADQQPQIIFVDIMMPRLD
 PilG_{L.en} (1) -----MEQQSDGLKVMVIDDSKTIRRTAETLLKKGCDVITADGFDALAKIADTHPNIIFVDIMMPRLD
 PilG_{A.ba} (1) -----MEDAFQNLKVMVIDDSKTIRRTAETLLQREGCEVITAVDGFEALS KIAEANFDIVFVDIMMPRLD
 PilG_{Xcc} (72) GYQTCALIKGNQLFKSTPVIMLSSKDGLFDKARGRIVGSEQYLTKPFTREELLSAIRTYVNA-----
 PilG_{Pa} (56) GYQTCALIKNNQLFKGTPVIMLSSKDGLFDKARGRIVGSEQYLTKPFTREELLD AIRKHVHA-----
 PilG_{L.en} (66) GYQTCALIKNNSAFKSTPVIMLSSKDGLFDKAKGRIVGSDQYLTKPFSKEELLGAIKAHVPSFTPVDAVS
 PilG_{A.ba} (66) GYQTCALIKNSQNYQNI PVIMLSSKDGLFDQAKGRVVGSD EYLT KPFSKDELLNAIRNHVSS-----

B

PilH_{Xcc} (1) MARIILIEDSPTDRAVFSQWLEKAGHTVVATDNAEEGLELIRSQAPDLVLM DVVLPGMSGFQATRALARD
 PilH_{Pa} (1) MARIILIEDSPTDTAVLTQLLQRNGHEVF AAGSAEDGIEAAKRELPDLVMM DVVLPGMNGFQATRALS RD
 PilH_{L.en} (1) MARILIVDDSPTEMYKLTAMLEKHGHQVLKAENGGDVALARQEKPDVVLMDIVMPGLNGFQATRQLTKD
 PilH_{A.ba} (1) MARILIVDDSPTE TFRFKEILTKHGYDVLEASNGADGVT LAKAEQPDVLM DVVMPGVNGFQATRQITRD
 PilH_{Xcc} (71) QATKDI PVLLVSTKGMETDKAWGLRQGASDYIVKPPREDDLIARIKQLVR-
 PilH_{Pa} (71) EQTKQI PVLIVSTKGMETDRAWGMRQGARDYIVKPPREDDLIARIKELLDK
 PilH_{L.en} (71) AETSAIPV IIVTTKQETDKVWGKRQGARDYLT KPVD EETLLKTINAVLAG
 PilH_{A.ba} (71) EDTKHI PVVIVSTKQATDRVWGKRQGAIDYLIKPIEEKQLIDVIKQFLN-

C

PilG_{Xcc} (1) MTENMAAGGELAGLKVMVIDDSKTIRRTAETLLKREGCE-VVTATDGFEALAKIADQQPQIIFVDIMMPR
 PilH_{Xcc} (1) -----MARIILIEDSPTDRAVFSQWLEKAGHT-VVATDNAEEGLELIRSQAPDLVLM DVVLPG
 CheY_{Xcc} (1) -----MSARILVVDD SASM RQMV SFALTSAGFA-VEEAEDGAVALGRAKGQRFNAVVT DVNMPN
 CheY_{Ec} (1) -----MADKELKFLVVDDFSTMRRI VRNLLKELGFNNVEEAEDGLDALNKLQAGGYGFVISDWNMPN
 PilG_{Xcc} (70) LDGYQTCALIKGNQLFKSTPVIMLSSKDGLFDKARGRIVGSEQYLTKPFTREELLSAIRTYVNA---
 PilH_{Xcc} (58) MSGFQATRALARDQATKDI PVLLVSTKGMETDKAWGLRQGASDYIVKPPREDDLIARIKQLVR----
 CheY_{Xcc} (59) MDGISLIRELRQLPDYKFTPMLMLTTESAADKKSEGKAAGATGWLVKPFNPEQLIATVQKVLG----
 CheY_{Ec} (65) MDGLELLKTIRADGAMSALPVLVMTAEAKKENI IAAAQAGASGYVVKPFTAATLEEKLNKIFEKLGM