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p7 MTDYAKLFEQDRAHFMHPSTHAHDHASGALPGRIITGASGVRIRDHQGRELLDAFAGLYC
 jN6 MTDFDQLFEQDRAHFMHPSTHAHDHASGALPGRIITGASGIRIRDHEGRELIDAFAGLYC
 jN15 MTDLDQLFEMDRAHFMHPSTHAHDHASGALPGRIITGGKGIRIQDHEGREYIDAFAGLYC
 jN16 MQSLDQLFEMDRAHFMHPSTHAHDHASGALPGRIITGGKGIRIEDHEGREYIDAFAGLYC
 jN17 MTSLDQLFEEDRAHFMHPSTHAHDHASGALPGKIVTGGKGIRIEDHQGREYIDAFAGLYC
 jN43 MTSLEQLLEMDRAHFMHPSTHAYDHASGALPGRIITGGKGIRIEDHEGREYIDAFAGLYC
 jN48 MTDTDLLLEMDRAHFFHPSTHLRDHASGELPGRIITGGKGIRIQDSEGREYIDAFAGLYC
 GabT MNSN-----KELMQRRSQAI PRGVGQIHPIFADRAENCRVWDVEGREYLDFAAGGIAV

p7 VNIGYGRLEVADAIHEQAKQLAYYHTYVGHASEAIIELSARIIRDWAPAGMKKVYYGLSG
 jN6 VNIGYGRTEVADAIYKQAKELAYYHTYVGHSTEAIIELSSRIIRDWAPAGMKKVYYGLSG
 jN15 VNIGYGRTEVADAIYEQAKELAYYHTYVGHSTEAIIELSSRIIRDWAPAGMKKVYYGMSG
 jN16 VNIGYGRTEVADAIYEQAKQLAYYHTYVGHSTDAIIELSSRIIRDWAPAGMKKVYYGMSG
 jN17 VNIGYGRTEVADAIYEQAKQLAYYHTYVGHSTDAIIELSSRIIRDWAPAGMKKVYYGMSG
 jN43 VNIGYGREEVADAIYEQAKQLAYYHTYVGHSDNPVIELSSRIIEDWAPAGMKKVYFGMSG
 jN48 VNVGYGRTEIADAIYEQAKELAYYHTYVGHSDNEPIIELSERIIREWAPAGMSKVYYGMSG
 GabT LNTGHLHPKVVAAVEAQLKKLSHTC-FQVLAYEPYLELCEIMNQKVPDFAKKTLLVTTG

p7 SDANETQVKLVRYNNVLGRPQKKKIISRQGYHSGGIVTGSLTGLAS-FHQHFDLPVEG
 jN6 SDANETQIKLVRYNNVLGRPQKKKIISRQGYHSGGIMTGSLTGLPS-FHQHFDLPVEG
 jN15 SDANETQIKLVWYNNVLGRPQKKKIISRQGYHSGGIMTGSLTGLPS-FHQHFDLPPIER
 jN16 SDANETQIKLVWYNNVLGRPNKKKIISRERGYPHSGGIVTGSLTGLPS-FHQHFDLPIDR
 jN17 SDANETQIKLVWYNNVLGRPNKKKIISRERGYPHSGGIVTGSLTGLPS-FHQHFDLPIDR
 jN43 SDANETQIKLVWYNNVLGRPNKKKIARERSYPHSGGIVTGSLTGLPS-FHQHFDLPIDR
 jN48 SDANETQIKLVWYNNVLGRPQKKKIISRQGYHSGGIMTGSLTGLPA-FHNHFDLPLEP
 GabT SEAVENAVKIARAATK-----RSGTIAFSGAYHGRTHYTLALTGKVNYPYSAGMGL----

p7 VKHTLCPHFYKAP-AGMDEAAFVRHCAQELENLILAEGPDTVAAFIGEPVMGTGGIIVPP
 jN6 IKHTVCPHWYKAP-AGMDEAAFVRYCADELEKLILAEGPDTVAAFIGEPVMGTGGIIVPP
 jN15 IKHTVCPHWYKAP-AGMSEAQFVRYCADELEKLILAEGPDTVAAFIGEPVMGTGGIIPPP
 jN16 VKHTVCPHWYRAP-AGMSEAQFVAYCVEELEKLIAREGADTIAAFIAEPVMGTGGIIPPP
 jN17 VKHTVCPHWYKAP-AGMSEAQFVAYCVEELEKLIAREGADTIAAFIAEPVMGTGGIIPPP
 jN43 VKHTVCPHWYNAP-PGMSEAQFVAYCVEELEKLIAREGADTIAAFIAEPVMGTGGIVPPP
 jN48 IRHTTCPHYRAP-AGMSEAEFSRHCADELEKMILAEGPDTVAAFIGEPVMGTGGIVPPP
 GabT MPGHVYRALYPCPLHGISEDDAIASI---HRIFKNDAAPEDIAAIVIEPVQEGGGFYASS

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p7 KGYWEAIQAVLAKYDVLLIADEVVCAFGRLGDKMGSQRHAMRPDLITTAKGLTSAYAPLS
 jN6 KGYWEAIQAVLNKYDVLLIADEVVCAFGRLGSKMGSQRYGMRPDLITTAKGLTSAYAPLS
 jN15 QGYWEAIQAVLNKYDILLIADEVVCGFGRLGSKMGSQHYGMKPDLITVAKGLTSAYAPLS
 jN16 QGYWEAIQAVLRKHDILLIADEVVCGFGRLGSKMGSQHYGIKPDLITVAKGLTSAYAPLS
 jN17 QGYWEAIQAVLRKHDILLISDEVVCGFGRLGSKMGAQHYGIKPDLITVAKGLTSAYAPLS
 jN43 QGYWEAIQAVLRKHDILLIADEVVCGFGRLGSKTGSEHYGIKPDLITVAKGLTSAYAPLS
 jN48 EGYWEAIQAVLNKYDILLIADEVVCGFGRTGSMFGSHHYGMKPDLITVAKGLTSAYAPLS
 GabT PAFMQRLRALCDEHGIMLIADEVQSGAGRTGTTLFAMEQMGVAPDLTTFAKSIAGGF - PLA

p7 AVIVGEKVWDVIDSASTREGAMGHGWTYSGHPICAAAALANLDILERENITANAADVGGY
 jN6 AVIVGEKVWDVIEKASQKEGAMGHGWTYSGHPICAAAALANLDILERENLTANAADV GAY
 jN15 GVIVGEKVWDVIEKGSQEHGPMGHGWTYSGHPICAAAALANLDILERENLTGNAADV GAY
 jN16 GVIVGEKVWDVIEKGSQEHGPMGHGWTYSGHPICAAAALANLDILERENLTGNAADV GAY
 jN17 GVIVGEKVWDVIEKGSQEHGPMGHGWTYSGHPICAAAALANLDILERENLTGNAADV GAY
 jN43 AVIVSEKVWDVIEKGSREHGVMGHGWTYSGHPVCAAAAALANLDILERENLTGNAADV GAY
 jN48 GVIVGEKVWKVLEQGSQYGPIGHGWTYSGHPICAAAALANLDI IERENLTGNAADTGAY
 GabT GVTGRAEVMDA-----VAPGGLGGTYAGNP IACVAALEVLKVFEQENLLQKANDLGQK

p7 LNQQRLRQAFEGHPLVGEVRGDGMLAALEFMADREARTPFDAALKVGPVKVSAACLERGMIA
 jN6 LNQRLRETTFEGHPLVGEVRGDGMLAALEFMADREARTPFDPALKVGPVKVSAACLEDGMIA
 jN15 LQQRLETFEGHPLVGEVRGVGMLAALEFMADKDARTPFDPALKVGPVKVSAACLEDGMIA
 jN16 LQQRLEAFGAHPLVGEVRGVGMLAALEFMADKDARTPFDPALKVGPVKVSAALEDGMIA
 jN17 LQQRLEAFGAHPLVGEVRGVGMLAALEFMADKDARTPFDPALKVGPVKVSAALEDGVIA
 jN43 LQQRLEAFGAHPLVGEVRGVGMLAALEFMADKGARTPFDPALKVSQKVAAALEDGLIV
 jN48 FQQRMRETF GDHPLVGEVRGVGLMAALEFVADKDKRTRFDP SLKVGPRVSAACLEDGMIA
 GabT LKDGLLAIAEKHPEIGDVRGLGAMIAIELFEDGDHNKPD---AKLTAEIVARARDKGLIL

p7 -RAMPHGDILGFAPPLVLSRAEAEDEVVGIAKAAVDAVAAEVL
 jN6 -RAMPHGDILGFAPPLVLTRA EAEDEVVGIAKAAVDEVAGEVL
 jN15 -RAMPHGDILGFAPPLVITRAEVDEIVGI AKQAVDEVVADEV L
 jN16 -RAMPHGDILGFAPPLVTTRA EVDEIVGI AKQAVDEVVADEV L
 jN17 -RAMPHGDILGFAPPLVTTRA EVDEIVGI VKQAVDEVVADEV L
 jN43 -RALPHGDILGFAPPLVTTRA EVDEIVAI AKEAFDEVADAVL
 jN48 -RAMPHGDILGFAPPLVITRAEVDEIVDI AKQAVDAVADEL V
 GabT LSCGPYYNVLRI LVPLTIEDAQIRQGLEIISQCFDEAKQ---

Figure 1