

10 20 30 40 50 60 70 80 90 100 110

CDRL1 L2 CDRL3

buried surface area with Pq9 LC residue and Pq9 HC in Angstroms (A) 3UZS:

PG9 OSALTQPA-SVSGSPGQSITISCTGTSNDVG--GY-E-SVSWYQQHPGKAPKV IYDVKRPSGVSNRFGSGSGNTASLTISGLQAEDEGDYCKSLTS-TR--RRVFGTGTKLTVL
1 SVELTQPP-SVSVSPGQTARITCSG--DALP--K-QYAYWYQKPGQAPVLV IYKDSERPISGIPERFSGSGGTTVTLTISGVQAEDEADYICQADS-SG--TYVFGTGTKVTVL
2 SVELTQPP-SVSVSPGQTASITCSG--DKLG--D-KYAYWYQKPGQSPVLV IYEDSKRPSGIPERFSGSGGNTASLTISGLQAEDEADYICQADS-SG--TYVFGTGTKVTVL
3 OSALTQPA-SVSGSPGQSITISCTGTSNDVG--SY-NLVSWYQKPGAPKLM IYEDSKRPSGVSNRFGSGSGNTASLTISGLQAEDEADYICSSYTS-S-TPVFGGSGTKLTVL
4 OSALTQPA-SVSGSPGQSITISCTGTSNDVG--GY-NLVSWYQKPGAPKLM IYEVSNRPSGVSNRFGSGSGNTASLTISGLQAEDEADYICSSYTS-S-TPVFGGSGTKLTVL
5 SVELTQPP-SVSVAPGKTARITCSG--NNIG--S-KSVWYQKPGQAPVLV IYDSDRPSGIPERFSGSGGNTATLTISRVEAGDEADYICQVWDSSD--HWVFGGSGTKLTVL
6 OSALTQPP-SASGSPGQSVTISCTGTSNDVG--GY-NLVSWYQKPGAPKLM IYEVSRPSGVPDRFSGSGGNTASLTISGLQAEDEADYICSSYAG-NN--NLLFGGSGTRTVL
7 SVELTQPP-SVSVSPGQTARITCSG--NNFG--N-KSVWYQKPGQSPVLV IYDDIDRPSGIPERFSGSGGNTATLTISRVEAGDEADYICQVWDSSDHRDVFGGSGTKLTVL
8 QAVLTQPP-SVSEAPRQRTISCTGSSNIG--N-NAVWYQKPGPCKLL IYDDLLPSGVSDFRSGSGGTSASLTISGLQSEDEADYICAAWDDSLN--GWVFGGSGTKLTVL
9 OSALTQPA-SVSGSPGQSITISCTGTSNDVG--DY-DVSWYQKPGAPKLV IYEVSKRPSGVPPDRFSGSKANSATSLTISGLQAEDEADYICSSYTS-S-LDYVFGTGTKVTVL
10 QVLTQPP-SVSGAPGQRTISCTGSSNVG--AG-YDVWYQKPGAPKLV IYGVNNRPSGVPPDRFSGSGNSASLTITGLQAEDEADYICQSFDDSLR--GLVFGGSGTKLTVL
11 OSALTQPA-SVSGSPGQSITISCTGTRSDVG--GY-DVSWYQKPGPCKLV IYEVTKRPSGIPDRFSGSGGNTASLTISGLQADDEADYICCSYAN-YD--ELILGSGTKLTVL

12 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYGASSRATGIPDRFSGSGGTDFTLTISRLEPEDFAVYICQYGSS--P-PTFGGSGTKLE
13 DIVMTQSPGTLSPGERATLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYLGSNRASGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQALQ--P-YTFGGSGTKLE
14 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYGASSRATGIPDRFSGSGGTDFTLTISRLEPEDFAVYICQYGSS--PLYSGGSGTKLE
15 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYGASSRATGIPDRFSGSGGTDFTLTISRLEPEDFAVYICQYGSS--P-WTFGGSGTKLE
16 DIVMTQSPGTLSPGERATLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYLGSNRASGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQALQ--P-PTFGGSGTKLE
17 DVVMTQSPGTLSPGERATLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYLGSNRASGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQALQ--P-WTFGGSGTKLE
18 DVVMTQSPGTLSPGERATLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYLGSNRASGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQALQ--P-DTFGGSGTKLE
19 DVVMTQSPGTLSPGERATLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYLGSNRASGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQALQ--P-ETFGGSGTKLE

20 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYGASSRATGIPDRFSGSGGTDFTLTISRLEPEDFAVYICQYGSS--P-LTFGGSGTKVD
21 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYGASSRATGIPDRFSGSGGTDFTLTISRLEPEDFAVYICQYGSS--P-A-FGGSGTKLE
22 AIRMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISLQPEDFAVYICQYGSS--P-PTFGGSGTKLE
23 AIRMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISLQPEDFAVYICQYGSS--P-PTFGGSGTKVD
24 DIVMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISLQPEDFAVYICQYGSS--P-PTFGGSGTKVD
25 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYGASSRATGIPDRFSGSGGTDFTLTISRLEPEDFAVYICQYGSS--P-WTFGGSGTKVD
26 DIVMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISLQPEDFAVYICQYGSS--P-PTFGGSGTKVE
27 AIRMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISLQPEDFAVYICQYGSS--P-PTFGGSGTKLE
28 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISLQPEDFAVYICQYGSS--P-PTFGGSGTKVD
29 DIVMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISLQPEDFAVYICQYGSS--P-PTFGGSGTKLE
30 DIVMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISLQPEDFAVYICQYGSS--P-PTFGGSGTKLE
CH01 EIVLTQSPGTLSPGERATLSCRASHNV-HPK-Y--FAWYQKPGQAPRLL IYGGSTRAGIPKFSGSGGTDFTLTISRVDPEDFAVYICQYGSS--P-YTFGGSGTKVE
PGT151 DIVMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYEVSNRPSGVSDRFVSGSGGTDFTLTISRVEAEDVGVIYCMQSKDF--P-LTFGGSGTKVD
B12 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYGVSNRASGIPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQSKDF--P-LTFGGSGTKVD
PGT145 EVVITQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQSKDF--P-LTFGGSGTKVD
VRC01 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQSKDF--P-LTFGGSGTKVD
PGV04 EIVLTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQSKDF--P-LTFGGSGTKVD

Ramos-LLC 95

Ramos (A) OSALTQPA-SVSGSPGQSITISCTGTSNDVG--GY-NLVSWYQKPGAPKLV IYDVKRPSGIPDRFSGSGGNTASLTISGLQADDEADYICSSYAN-NS--SQVFGGSGTKLTVL

PGT135 (K) EIVMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQSKDF--P-LTFGGSGTKVD
31 (K) DIVMTQSPGTLSPGERATLSCRASQSV-SSS-Y--LAWYQKPGQAPRLL IYAASSLQSGVPPDRFSGSGGTDFTLTISRVEAEDVGVIYCMQSKDF--P-LTFGGSGTKVD

Lambda

Kappa