

Reference	QVQLKQSGPGLLQPSSLTCTVSGFSLGRGVGH--WIRQSPGKGLELWLVGIWRGGTDTYNVAFMSRLSINKDDSKSQVFFMTMSLRLPDDTAIYYCAR--QGSNFPPLAYWYGQGLTLVTVSA
Assembly	QVQLKQSGPGLLQPSSLTCTVSGFSLGRGGGGGGFIRQSPGKGLEWLVGIWRGGSTCTYNPSLKSILVNISLDTSKNQVSSLSLAVQEADLVAIFYFPQRQGSQGNFPPLAYWYGQGLTLVTVSA

Reference NIVMTQTPKFLLVISIGDSITITCKASQSVNTDAA----WYQKPKGQSPQLLIYQASTRYTGVPDRFGSGSGYGTDFTTTISAVQAEDLAVVYCHQDYSSSLPTFGAGTKLEIK  
Assembly NLVMTQTPKFLLVTPGEPATITLRSSQSLNENGYNYKWYQKPKGQSPQLLIYQASTRASGVPDRFGSPRYGTGGSDFISRVAQEDLAVPECHQDLQSP-TFGAGTKLEIK

Reference	EVQLVQSGAEVKKPGESLKISRGGSYSTFTYIWLGRWQMPGKGLDWIGIMSPVDSDIRYSPFQGGVTMSVDKSIITAYLQWNSLKASDTAMYICARRRPGQGYDFDWGQGTTLTVSS
Assembly	EVQLVQSGAEVKKPGESLKISGHGSSYFTFTYIWLGRWQMPNK-LDWLIGIMSPVDSDLRYSPFQGGVTMSVDKSIITAYLQWNSLKASDTAMYIHAQRP--QFPFDWFGQGTTLTVSS
	***** ***** *****

Reference DIQMTQSPSSLSASVGDRVTITCRASQGIISSLAWYQQKPEKAPKSLIYAASSLQSGVPSRFSGSGSGDFTLTITSLQPEDFATYQCQYNLYPYTFGGQTKLEIK  
 Assembly DIQMTQSPSSLSASVGDRVITITCRASQGIISSLAWYQQKPEKAPKSLIYAASSLQSGVPSRFSGSGSGDPLTLTITLLPEDFATYQCQYNLYPYTFGGQTKLEIK

Reference QAAQLVQSGPEVRKPGTSTSVKVKSCAPGNLTLTYYDHWVRVQPGQLQWMGWISHEGDKK----VIVERFKAQVTDW----RSTNTAYLQLSGLTSGDTAVVYCAKGSKHLRLDYALYDDDGALNWAYVDVYLSNLEFWQGGTAVTVSS  
Assembly QV-LLQGPPEELVKP-SQEKVKSCAPGNLTLTYYDHWVRVQPGQLQWMGWISHEGDKKKLRKVLVVERFKFTTSTPAAGLVGASTSTAYLQLSLTSGDTAVVYCAK-----DLADVD-----VDVDA-----LEFWQGGTAVTVSS

Reference DFLVLTQSPHSLSVTPGESASISCKSSHSLIHGDRNNYLAWYVQKPGRSQQLLLYLASSRASGVDPDRFSGSGSDKDFTLTKISRVETEDVGVTYYCMQGRESPWTFGGGTQKVDIK

Assembly DFLVLTQSPHSLSVTPGESASISCKSSHSLIHGDRSNYLAWYVQKPGRSQQLLIDLASERASGVDPDRFSGSGSDKDFTLTKISRVETEDVGVTYYCMQGRESPWTFGGGTQKVDIK