```
TNF1:
DP51    EVQLVESGGGLVQPGGSLRLSCAASGFTFS SYSMN WVRQAPGKGLEWVS YISSSSSTIYY(SEQ
ID NO: 472)
DP53    EVQLVESGGGLVQPGGSLRLSCAASGFTFS SYWMH WVRQAPGKGLVWVS RINSDGSSTSY(SEQ
ID NO: 473)
TNF1    QVQLVESGGGLVQPGGSLRLSCAASGFTFS DYWMY WVRQAPGKGLEWVS EINTNGLITKY
TNF13   EVQLVESGGGLVQPGGSLRLSCAASGFTFS DYWMY WVRQAPGKGLEWVS EINTNGLITKY
TNF14   EVQLVESGGGLVQPGGSLRLSCAASGFTFS DYWMY WVRQAPGKGLEWVS EINTNGLITKY
         ****************************  * *  ********** ***  *        *

DP51    ADSVKG RFTISRDNAKNSLYLQMNSLRDEDTAVYYCAR ------ WGQGTLVTVSS (SEQ ID
NO: 472 - continued)
DP53    ADSVKG RFTISRDNAKNTLYLQMNSLRAEDTAVYYCAR ------ WGQGTLVTVSS (SEQ ID
NO: 473 - continued)
TNF1    PDSVKG RFTISRDNAKNTLYLQMNSLKPEDTALYYCAR SPSGFN RGQGTQVTVSS
TNF13   PDSVKG RFTISRDNAKNTLYLQMNSLKPEDTAVYYCAR SPSGFN RGQGTQVTVSS
TNF14   PDSVKG RFTISRDNAKNTLYLQMNSLKPEDTALYYCAR SPSGFN RGQGTLVTVSS
         ***** ********** ********  **** *****          **** *****
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Figure 22

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TNF2:
DP54    EVQLVESGGGLVQPGGSLRLSCAASGFTFS -----SYWMS WVRQAPGKGLEWVANIKQDGSEKYY
(SEQ ID NO: 474)
TNF2    QVQLVESGGGLVQAGGSLRLSCAASGRTFS EPSGYTYTIG WFRQAPGKEREFVARIYWSSGLTYY
TNF15   EVQLVESGGGLVQPGGSLRLSCAASGRTFS EPSGYTYTIG WFRQAPGKGREFVARIYWSSGLTYY
TNF16   EVQLVESGGGLVQPGGSLRLSCAASGFTFS EPSGYTYTIG WFRQAPGKGREFVARIYWSSGLTYY
TNF17   EVQLVESGGGLVQPGGSLRLSCAASGRTFS EPSGYTYTIG WFRQAPGKGREFVARIYWSSGLTYY
TNF18   EVQLVESGGGLVQPGGSLRLSCAASGRTFS EPSGYTYTIG WFRQAPGKGREFVARIYWSSGLTYY
TNF19   EVQLVESGGGLVQPGGSLRLSCAASGRTFS EPSGYTYTIG WFRQAPGKGREFVARIYWSSGLTYY
         ************ ************ ***       *    * ******  * ** *       **

DP54    VDSVKG RFTISRDNAKNSLYLQMNSLRAEDTAVYYCAR --------------- WGQGTLVTVSS
(SEQ ID NO: 474 - continued)
TNF2    ADSVKG RFTISRDIAKNTVDLLMNSLKPEDTAVYYCAA RDGIPTSRSVGSYNY WGQGTQVTVSS
TNF15   ADSVKG RFTISRDIAKNTVDLQMNSLKPEDTAVYYCAA RDGIPTSRSVGSYNY WGQGTQVTVSS
TNF16   ADSVKG RFTISRDIAKNTVDLQMNSLKPEDTAVYYCAA RDGIPTSRSVGSYNY WGQGTQVTVSS
TNF17   ADSVKG RFTISRDNAKNTVDLQMNSLKPEDTAVYYCAA RDGIPTSRSVGSYNY WGQGTQVTVSS
TNF18   ADSVKG RFTISRDIAKNTVDLQMNSLRPEDTAVYYCAA RDGIPTSRSVGSYNY WGQGTQVTVSS
TNF19   ADSVKG RFTISRDIAKNTVDLQMNSLKPEDTAVYYCAA RDGIPTSRSVGSYNY WGQGTLVTVSS
         ***** ******* ***   * ****  *********                    ***** *****
```

Figure 23

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TNF3:
DP29    EVQLVESGGGLVQPGGSLRLSCAASGFTFS DHYMDWVRQAPGKGLEWVG RTRNKANSYTTEYAAS
(SEQ ID NO: 475)
TNF3    EVQLVESGGGLVQAGGSLSLSCSASGRSLS NYYMGWFRQAPGKERELLG NI--SWRGYNIYYKDS
TNF20   EVQLVESGGGLVQPGGSLRLSCAASGRSLS NYYMGWFRQAPGKGRELLG NI--SWRGYNIYYKDS
TNF21   EVQLVESGGGLVQPGGSLRLSCAASGFTFS NYYMGWFRQAPGKGRELLG NI--SWRGYNIYYKDS
TNF22   EVQLVESGGGLVQPGGSLRLSCAASGRSLS NYYMGWFRQAPGKGRELLG NI--SWRGYNIYYKDS
TNF23   EVQLVESGGGLVQPGGSLRLSCAASGRSLS NYYMGWFRQAPGKGRELLG NI--SWRGYNIYYKDS
        ************ **** *** ***   *   ** * ******  *  *         *   *  *

DP29    VKG RFTISRDDSKNSLYLQMNSLKTEDTAVYYCAR--------------- WGQGTLVTVSS
(SEQ ID NO: 475 - continued)
TNF3    VKG RFTISRDDAKNTIYLQMNRLKPEDTAVYYCAA SILPLSDDPGWNTY WGQGTQVTVSS
TNF20   VKG RFTISRDDSKNTIYLQMNSLKPEDTAVYYCAA SILPLSDDPGWNTY WGQGTQVTVSS
TNF21   VKG RFTISRDDSKNTIYLQMNSLKPEDTAVYYCAA SILPLSDDPGWNTY WGQGTQVTVSS
TNF22   VKG RFTISRDDSKNTIYLQMNSLKTEDTAVYYCAA SILPLSDDPGWNTY WGQGTQVTVSS
TNF23   VKG RFTISRDDSKNTIYLQMNSLKPEDTAVYYCAA SILPLSDDPGWNTY WGQGTLVTVSS
        *** ******** **  ***** ** *********                  ***** *****
```

Figure 24