

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL
Revised March 31, 2022

USAN (KL-70) MELREDABLEUKIN ALFA
PRONUNCIATION mel red" ab loo' kin al' fa
THERAPEUTIC CLAIM Treatment of autoimmune diseases

CHEMICAL NAMES

1. Immunoglobulin G1, (human monoclonal γ 1-chain) fusion protein with peptide (synthetic linker) fusion protein with interleukin 2 (synthetic human mutein), disulfide with human monoclonal κ -chain, dimer (Source: CAS)
2. human immunoglobulin G1 non-binding variant (heavy chain 1-444, L232>A, L233>A, P327>G) fused at the C-terminus of the heavy chain via peptidyl linker 445GGGGSGGGGSGGGGS459 to human interleukin 2 (1-133, 460-592 in the current sequence) variant (T3 >A462, N88>D547, C125>A584), dimer, produced in Chinese hamster ovary (CHO) cells, glycoform alfa; human non-binding immunoglobulin G1 kappa (IgG1- κ) fused via a peptide linker to a mutated human interleukin 2 (IL2 mutein): fusion protein combining a gamma1 heavy chain (1-444) [Homo sapiens IGHV3-23*01; Homo sapiens IGHJ4*01; Homo sapiens IGHG1*01; VH: 1-115; CH1: 116-213; hinge: 214-228; CH2: 229-338 (L232>A, L233>A, P327>G); CH3: 339-443; CHS: 444-444 (K445del); CDR Kabat H1: SYAMS (31-35); CDR Kabat H2: AISGSGGSTYYADSVKG (50-66); CDR Kabat H3: GSGFDY (99- 104)], a (G4S)₃ peptide linker (445-459), and Homo sapiens interleukin 2 (460-592) [T3 >A462, N88>D547, C125>A584]-variant, (218- 215')-disulfide with kappa light chain (1'-215') [Homo sapiens IGKV3-20*01; Homo sapiens IGKJ1*01; Homo sapiens IGKC*01; VL: 1-108; CL: 109-215; CDR Kabat L1: RASQSVSSSYLA (24-35); CDR Kabat L2: GASSRAT (51-57); CDR Kabat L3: QQYGSSPLT (90-98)]; dimer (224-224":227-227")-bisdisulfide, produced in Chinese hamster ovary (CHO) cells, glycoform alfa (Source : WHO pINN list 126)

STRUCTURAL FORMULA

Heavy chain (X, X')

EVQLLESGGG	LVQPGGSLRL	SCAASGFTFS	SYAMSWVRQA	PGKGLEWVSA	50
ISGSGGSTYY	ADSVKGRFTI	SRDNSKNTLY	LQMNSLRAED	TAVYYCAKGS	100
GFDYWGQGTL	VTVSSASTKG	PSVFLAPSS	KSTSGGTAAL	GCLVKDYFPE	150
PVTVSWNSGA	LTSGVHTFPA	VLQSSGLYSL	SSVTVTPSSS	LGTQTYICNV	200
NHKPSNTKVD	KKVEPKSCDK	THTCPPCPAP	EAAGGPSVFL	FPPKPKDTLM	250
ISRTPEVTCV	VVDVSHEDPE	VKFNWYVDGV	EVHNAKTKPR	EEQYNSTYRV	300
VSVLTIVLHQD	WLNKEYKCK	VSNKALGAPI	EKTISKAKGQ	PREPQVYTLP	350
PSRDELTKNQ	VSLTCLVKGF	YPSDIAVEWE	SNGQPENNYK	TTPPVLDSDG	400
SFFLYSKLTV	DKSRWQQGNV	FSCSVMEAL	HNHYTQKSLS	LSPGGGGGSG	450
GGGSGGGGSA	PASSSTKKTQ	LQLEHLLLDL	QMILNGINNY	KNPKLTRMLT	500
FKFYMPKKAT	ELKHLQCLEE	ELKPLEEVLN	LAQSKNFHLR	PRDLISDINV	550
IVLELKGSET	TFMCEYADET	ATIVEFLNRW	ITPAQSIIST	LT	592

Light chain (X', X'')

EIVLTQSPGT	LSLSPGERAT	LSCRASQSVS	SSYLAWYQQK	PGQAPRLLIY	50'
GASSRATGIP	DRFSGSGSGT	DFTLTISRLE	PEDFAVYYCQ	QYGSSPLTFG	100'
QGTKVEIKRT	VAAPSVFIFP	PSDEQLKSGT	ASVVCLLNNF	YPREAKVQWK	150'
VDNALQSGNS	QESVTEQDSK	DSTYLSSTL	TLSKADYEKH	KVYACEVTHQ	200'
GLSSPVTKSF	NRGEC				215'

Disulfide bridges

22-96	22''-96''	23'-89'	23'''-89''	135'-195'	135'''-195'''	142-198	142''-198''
215'-218	215'''-218''	225-225''	228-228''	259-319	259'-319''	365-423	365''-423''
517-564	517''-564''						

Glycosylation sites (N)

293	294''
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MOLECULAR FORMULA C7772 H12116 N2076 O2438 S52 (firm)

MOLECULAR WEIGHT 178.0 kDa (Expasy, peptide only)

TRADEMARK None as yet

SPONSOR Genentech/Roche

CODE DESIGNATIONS RO7049665, RG7835

CAS REGISTRY NUMBER 2056881-92-4

UNII FAA3D9E2LP

WHO NUMBER 11723

gbk