

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (FG-70)

MOSUNETUZUMAB

PRONUNCIATION

moe sun' e tooz' ue mab

THERAPEUTIC CLAIM

Treatment of hematologic malignancies

CHEMICAL NAMES

1. Immunoglobulin G1, humanized bispecific, anti-(human CD3 (antigen))(BTCT4465A γ 1-chain), disulfide with anti-(human CD3 (antigen)) BTCT4465A κ 4-chain, anti-(human CD20 (antigen)) BTCT4465A γ 3-chain and anti-(human CD20 (antigen)) BTCT4465A κ 1-chain
2. Immunoglobulin G1-kappa anti-(*Homo sapiens* T-cell surface glycoprotein CD3 epsilon chain (CD3e antigen)) and immunoglobulin G1-kappa anti-(*Homo sapiens* B-lymphocyte antigen CD20) heterodimer; humanized monoclonal antibody bispecific; γ 1 heavy chain anti-CD3e (1-449) [humanized VH (*Homo sapiens* IGHV1-3*01 (83%) –(IGHD)-IGHJ4*01) [8.8.12] (1-119) -*Homo sapiens* IGHG1*01 {CH3[D¹⁶>E(358),L¹⁸>M(360),T²⁶>S(368),L²⁸>A(370),Y⁶⁷>V(409)]} (120-449)] (222-219')-disulfide with kappa light chain anti-CD3e (1'-219') [humanized V-KAPPA (*Homo sapiens* IGKV4-1*01 (92%) –IGKJ1*01) [12.3.8] (1'-112') -*Homo sapiens* IGKC*01 (113'-219')] and γ 1 heavy chain anti-CD20 (1-452) [humanized VH (*Homo sapiens* IGHV3-23*04 (82%) –(IGHD)-IGHJ4*01 (93%)) [8.8.15] (1-122) -*Homo sapiens* IGHG1*03 {CH1[R⁹⁷>K(219),], CH2[N⁶⁷>G(302)], CH3[T²⁶>W(371)]} (123-452)] (225-213')-disulfide with kappa light chain anti-CD20 (1'-213') [humanized V-KAPPA (*Homo sapiens* IGKV1-39*01 (87%) – IGKJ1*01) [5.3.9] (1'-106') -*Homo sapiens* IGKC*01 (107-213')], heterodimer (228-231":231-234")-bisdisulfide

STRUCTURAL FORMULA

Anti *Homo sapiens* CD3E Heavy chain

EVQLVQSGAE	VKKPGASVKV	SCKASGYTFT	NYIHWVRQA	PGQGLEWIGW	50
IYPGDGNTKY	NEKFKGRATL	TADTSTSTAY	LELSSLRSED	TAVYYCARDS	100
YSNYYFDYWG	QGTLLVTVSSA	STKGPSVFPL	APSSKSTSGG	TAAIGCLVKD	150
YFPEPVTVSW	NSGALTSGVH	TFFPAVLQSSG	LYSLSSVVTV	PSSSLGTQTY	200
ICNVNHRKPSN	TKVDKRVPEK	SCDKTHTCPP	CPAPELLGGP	SVFLFPPKPK	250
DTLMISRTPE	VTCVVVDVSH	EDPEVKFNWY	VDGVEVHNAK	TKPREEQYGS	300
TYRVVSVLTV	LHQDWLNGKE	YKCKVSNKAL	PAPIEKTISK	AKGQPREPQV	350
YTLPPSREEM	TKNQVSLSCA	VKGFYPSDIA	VEWESNGQPE	NNYKTTTPVL	400
DSGDSFFLVS	KLTVDKSRWQ	QGNVFSCSVM	HEALHNHYTQ	KSLSLSPGK	449

Anti *Homo sapiens* CD3E Light chain

DIVMTQSPDS	LAVSLGERAT	INCKSSQSL	NSRTRKNYLA	WYQKPGQPP	50'
KLLIYWASTR	ESGVPDRFSG	SGSGTDFTLT	ISSLAQEDVA	VYCTQSFIL	100'
RTFGQGTKVE	IKRTVAAPSV	FIFPPSDEQL	KSGTASVCL	LNNFYPREAK	150'
VQWKVDNALQ	SGNSQESVTE	QDSKDYSTSL	SSTLTLSKAD	YEKHKVYACE	200'
VTHQGLSSPV	TKSFNRGEC				219'

Anti *Homo sapiens* CD20 Heavy chain

EVQLVESGGG	LVQPQGSRLR	SCAASGYTFT	SYNMHWVRQA	PGKGLEWVGA	50'
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IYPGNGDTSY	NQKFKGRFTI	SVDKSKNTLY	LQMNSLRAED	TAVYYCARVV	100"
YYSNSYWYFD	VWQGGLVTV	SSASTKGPSV	FPLAPSSKST	SGGTAALGCL	150"
VKDYFPEPVT	VSWNSGALTS	GVHTFPAVLQ	SSGLYSLSSV	VTVPSSSLGT	200"
QTYICNVNPK	PSNTKVDKVV	EPKSCDKTHT	CPPCPAPELL	GGPSVFLFPP	250"
KPKDTLMISR	TPEVTCVVVD	VSHEDEPEVKF	NWYVDGVEVH	NAKTKPREEQ	300"
YGSTYRVVSV	LTVLHQDWLN	GKEYKCKVSN	KALPAPIEKT	ISKAKGQPRE	350"
PQVYTLPEPSR	EMTKNQVSL	WCLVKGFYPS	DIAVEWESNG	QPENNYKTP	400"
PVLDSDGSPF	LYSKLTVDKS	RWQQGNVFSC	SVMHEALHNS	YTQKSLSLSP	450"
GK					452"

Anti *Homo sapiens* CD20 Light chain

DIQMTQSPSS	LSASVGDRVT	ITCRASSSVS	YMHWYQQKPG	KAPKPLIYAP	50"
SNLASGVPSR	FSGSGSGTDF	TLTISSLQPE	DFATYQCQQW	SFNPPTFGQG	100"
TKVEIKRTVA	APSVFIFPPS	DEQLKSGTAS	VVCLLNNFYP	REAKVQWKVD	150"
NALQSGNSQE	SVTEQDSKDS	TYSLSSTLT	SKADYEKHKV	YACEVTHQGL	200"
SSPVTKSFNR	GEC				213"

Disulfide bridges

22-96	22"-96"	23'-94'	23'''-87'''	133'''-193'''	139'-199'	146-202	149"-205"
219'-222	213'''-225"	228-231"	231-234"	263-323	266"-326"	369-427	372"-430"

MOLECULAR FORMULA	C ₆₅₁₅ H ₁₀₀₃₁ N ₁₇₂₅ O ₂₀₂₅ S ₄₃
MOLECULAR WEIGHT	146.3 kDa
TRADEMARK	None as yet
SPONSOR	Genentech/Roche
CODE DESIGNATIONS	RO7030816, RG7828, BTCT4465A
<u>CAS</u> REGISTRY NUMBER	1905409-39-3
UNII	LDJ89SS0YG
WHO NUMBER	10621

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