STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (HI-119)	GLOFITAMAB
PRONUNCIATION	gloe” fi tam’ ab
THERAPEUTIC CLAIM	Treatment of cancer

CHEMICAL NAMES

1. Immunoglobulin G1 [149-glutamic acid,215-glutamic acid, 461-alanine,462-alanine,556-glycine,581-cysteine,593-tryptophan], anti-(human CD20 antigen) (human-Mus musculus monoclonal RG6026 VH-CH1 fragment) fusion protein with peptide (synthetic 10-amino acid linker) fusion protein with immunoglobulin anti-(human CD3 antigen ε-chain) (human-Mus musculus monoclonal RG6026 heavy chain VL(λ)-CH1-CH2-CH3), (222→219''')-disulfide with immunoglobulin anti-(human CD20 antigen) (human-Mus musculus monoclonal RG6026 κ-chain [128-arginine,129-lysine]) and (447→232'')-disulfide with immunoglobulin anti-(human CD3 antigen ε-chain) (human-Mus musculus monoclonal RG6026 light chain VH-CL(κ)), (453→228'), (456→231'), (581→351')-tris(disulfide) with immunoglobulin G1 [149-glutamic acid,215-glutamic acid,236-alanine,237-alanine,331-glycine,351-cysteine,368-serine,370-alanine,409-valine] anti-(human CD20 antigen) (human-Mus musculus monoclonal RG6026 γ1-chain) disulfide with human-Mus musculus monoclonal RG6026 κ-chain [128-arginine,129-lysine]

2. Immunoglobulin G1-lambda/kappa with domain cross-over, anti-[*Homo sapiens* MS4A1 (membrane-spanning 4- domains subfamily A member 1, CD20)] and anti-[*Homo sapiens* CD3E (CD3 epsilon, Leu-4)] monoclonal antibody, bispecific, trivalent; gamma-lambda heavy chain anti-MS4A1 and anti-CD3E (VH-CH1-V-LAMBDA-CH1-CH2-CH3) (1-674) [humanized VH anti-MS4A1 (*Homo sapiens* IGHV1-69*02 (84.7%) - (IGHD) -IGHJ4*01 (100%)) [8.8.12] (1-119) -*Homo sapiens* IGHG1*01, G1m17 (CH1 K26>E (149), K119>E (215), K120 (216) (120-217), hinge 1-6 (218-223)) (120-223) -10- mer bis(tetraglycyl-seryl) linker (224-233) -V-LAMDDA anti-CD3E (*Mus musculus* IGLV1*01 (81.2%) -IGLJ1*01 (100%)/*Homo sapiens* IGLV7-46*01 (80.0%) -IGLJ3*01 (100%)) [9.3.9] (234-342) -2-mer biseryl linker (343-344) - *Homo sapiens* IGHG1*01, G1m17, G1m1 (CH1 K120 (441) (345-442), hinge 1-15 (443-457), CH2 L1.3>A (461), L1.2>A (462), P114>G (556) (458-567), CH3 S10>C (581), D12 (583), L14 (585), T22>W (593) (568-672), CHS (673- 674)) (345-674)], (222-219')-disulfide with kappa light chain humanized anti-MS4A1 (1'-219') [humanized V-KAPPA (*Homo sapiens* IGKV2-28*01 (87.0%) -IGKJ4*01 (100%)) [11.3.9] (1'-112') -*Homo sapiens* IGKC*01 (98.1%), E12>R (128), Q13>K (129), Km3 A45.1 (158), V101 (196) (113'-219')]; (447-232''')-disulfide with VH-C-kappa light chain humanized anti-CD3E (1'''-232''') [humanized VH (*Homo sapiens* IGHV3-23*03 (87.0%) -IGKJ6*01 (90.9%)) [8.10.16] (1'''-125''') -*Homo sapiens* IGKC*01 (99.1%), T1.3>S (127), Km3 A45.1 (171), V101 (209) (126'''-232''')], gamma1 heavy chain humanized anti-

MS4A1 (1''-449'') [humanized VH (*Homo sapiens* IGHV1-69*02 (84.7%) -(IGHD) -IGHJ4*01 (100%)) [8.8.12] (1''-119'') -*Homo sapiens* IGHG1*01, G1m17,1 (CH1 K26>E (149), K119>E (215), K120 (216) (120''-217''), hinge 1-15 (218''-232''), CH2 L1.3>A (236), L1.2>A (237), P114>G (331) (233''- 342''), CH3 Y5>C (351), D12 (358), L14 (360), T22>S (368), L24>A (370), Y86>V (409) (343''-447''), CHS (448''- 449'')) (120''-449'')], (222''-219'''')-disulfide with kappa light chain humanized anti-MS4A1 (1''''-219'''') [humanized V-KAPPA (*Homo sapiens* IGKV2-28*01 (87.0%) -IGKJ4*01 (100%)) [11.3.9] (1''''-112'''') -*Homo sapiens* IGKC*01 (98.1%), E12>R (128), Q13>K (129), Km3 A45.1 (158), V101 (196) (113''''- 219'''')]; dimer (453-228'':456-231'':581-351'')-trisdisulfide

STRUCTURAL FORMULA

Heavy chain 1-674 anti-MS4A1, anti-CD3

QVQLVQSGAE	VKKPGSSVKV	SCKASGYAFS	YSWINWVRQA	PGQGLEWMGR	50
IFPGDGDTDY	NGKFKGRVTI	TADKSTSTAY	MELSSLRSED	TAVYYCARNV	100
FDGYWLVYWG	QGTLVTVSSA	STKGPSVFPL	APSSKSTSGG	TAALGCLVED	150
YFPEPVTVSW	NSGALTSGVH	TFPAVLQSSG	LYSLSSVVTV	PSSSLGTQTY	200
ICNVNHKPSN	TKVDEKVEPK	SCDGGGGSGG	GGSQAVVTQE	PSLTVSPGGT	250
VTLTCGSSTG	AVTTSNYANW	VQEKPGQAFR	GLIGGTNKRA	PGTPARFSGS	300
LLGGKAALTL	SGAQPEDEAE	YYCALWYSNL	WVFGGGTKLT	VLSSASTKGP	350
SVFPLAPSSK	STSGGTAALG	CLVKDYFPEP	VTVSWNSGAL	TSGVHTFPAV	400
LQSSGLYSLS	SVVTVPSSSL	GTQTYICNVN	HKPSNTKVDK	KVEPKSCDKT	450
HTCPPCPAPE	AAGGPSVFLF	PPKPKDTLMI	SRTPEVTCVV	VDVSHEDPEV	500
KFNWYVDGVE	VHNAKTKPRE	EQYNSTYRVV	SVLTVLHQDW	LNGKEYKCKV	550
SNKALGAPIE	KTISKAKGQP	REPQVYTLPP	CRDELTKNQV	SLWCLVKGFY	600
PSDIAVEWES	NGQPENNYKT	TPPVLDSDGS	FFLYSKLTVD	KSRWQQGNVF	650
SCSVMHEALH	NHYTQKSLSL	SPGK			674

Heavy chain 1''-449'' anti-MS4A1

QVQLVQSGAE	VKKPGSSVKV	SCKASGYAFS	YSWINWVRQA	PGQGLEWMGR	50
IFPGDGDTDY	NGKFKGRVTI	TADKSTSTAY	MELSSLRSED	TAVYYCARNV	100
FDGYWLVYWG	QGTLVTVSSA	STKGPSVFPL	APSSKSTSGG	TAALGCLVED	150
YFPEPVTVSW	NSGALTSGVH	TFPAVLQSSG	LYSLSSVVTV	PSSSLGTQTY	200
ICNVNHKPSN	TKVDEKVEPK	SCDKTHTCPP	CPAPEAAGGP	SVFLFPPKPK	250
DTLMISRTPE	VTCVVVDVSH	EDPEVKFNWY	VDGVEVHNAK	TKPREEQYNS	300
TYRVVSVLTV	LHQDWLNGKE	YKCKVSNKAL	GAPIEKTISK	AKGQPREPQV	350
CTLPPSRDEL	TKNQVSLSCA	VKGFYPSDIA	VEWESNGQPE	NNYKTTPPVL	400
DSDGSFFLVS	KLTVDKSRWQ	QGNVFSCSVM	HEALHNHYTQ	KSLSLSPGK	449

Light chain 1'-219' and 1''''-219'''' anti-MS4A1

DIVMTQTPLS	LPVTPGEPAS	ISCRSSKSLL	HSNGITYLYW	YLQKPGQSPQ	50
LLIYQMSNLV	SGVPDRFSGS	GSGTDFTLKI	SRVEAEDVGV	YYCAQNLELP	100
YTFGGGTKVE	IKRTVAAPSV	FIFPPSDRKL	KSGTASVVCL	LNNFYPREAK	150
VQWKVDNALQ	SGNSQESVTE	QDSKDSTYSL	SSTLTLSKAD	YEKHKVYACE	200
VTHQGLSSPV	TKSFNRGEC				220

Light chain 1'''-232''' anti-CD3E

EVQLLESGGG	LVQPGGSLRL	SCAASGFTFS	TYAMNWVRQA	PGKGLEWVSR	50
IRSKYNNYAT	YYADSVKGRF	TISRDDSKNT	LYLQMNSLRA	EDTAVYYCVR	100
HGNFGNSYVS	WFAYWGQGTL	VTVSSASVAA	PSVFIFPPSD	EQLKSGTASV	150
VCLLNNFYPR	EAKVQWKVDN	ALQSGNSQES	VTEQDSKDST	YSLSSTLTLS	200
KADYEKHKVY	ACEVTHQGLS	SPVTKSFNRG	EC		232

Disulfide bridges

22-96	22''-96''	22'''-98'''	23'-93'	23''''-93''''	139'-199'	139''''-199''''	146-202
146''-202''	152'''-212'''	222-219'	222''-219''''	263''-323''	369''-427''	371-427	447-232'''
453-228''	456-231''	488-548	581-351''	594-652			

Glycosylation sites (N)

524 299''

MOLECULAR FORMULA $C_{8632}H_{13326}N_{2296}O_{2701}S_{58}$

MOLECULAR WEIGHT 194.3 kDa

TRADEMARK	None as yet
SPONSOR	Genentech/Roche
CODE DESIGNATIONS	RG6026
CAS REGISTRY NUMBER	2229047-91-8
UNII	06P3KLK2J8
WHO NUMBER	11145

gbk