STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (HI-137)	VIBECOTAMAB
PRONUNCIATION	vye” bek oh’ ta mab
THERAPEUTIC CLAIM	Immunomodulator, antineoplastic

CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human CD3 antigen) (human-Mus musculus monoclonal XmAb14045 γ1-chain), (265→229'),(268→232')- bis(disulfide) with immunoglobulin G1, anti-(human CD123 antigen) (human-Mus musculus monoclonal XmAb14045 γ1-chain) disulfide with human-Mus musculus monoclonal XmAb14045 κ-chain

2. Immunoglobulin half-G1-kappa/scFv-h-CH2-CH3, anti-(*Homo sapiens* Interleukin-3 receptor subunit alpha (IL-3R subunit alpha, IL-3RA, CD123 antigen)) and anti-(*Homo sapiens* T-cell surface glycoprotein CD3 epsilon chain (T-cell surface antigen T3/Leu-4 epsilon chain, CD3e antigen)); monoclonal antibody, bispecific; γ1 heavy chain anti-IL3RA (1-449) [VH (*Mus musculus* IGHV1-26*01 (84%) –(IGHD)-IGHJ3*01 (93%)/*Homo sapiens* IGHV1-46*01 (79%) –(IGHD)-IGHJ6*01 (91%)) [8.8.13] (1-120) -*Homo sapiens* IGHG1*03 {CH1[N^{91}>D(211),R^{97}>K(217)], CH2[E^{3}>P(236),L^{4}>V(237),L^{5}>del,G^{6}>A(238), S^{37}>K(269),Q^{65}>E(297)], CH3[L^{28}>D(370),K^{30}>S(372) N^{44}>D(386),Q^{78}>E(420),N^{81}>D(423)]} (121-449) (223-220')-disulfide with κ light chain anti-IL3RA (1'-220') [V-KAPPA (*Homo sapiens* IGKV4-1*01 (89%) –IGKJ2*01 (92%))[12.3.9] (1'-113') -*Homo sapiens* IGKC (114'-220') heavy chain scFv-h-CH2-CH3, anti-CD3E (1''-485'') [VH (*Homo sapiens* IGHV3-73*01 (87%) –(IGHD)-IGHJ6*01 (91%)) [8.10.16] (1''-125'') tetrakis(glycyllysylprolylglycylseryl)-linker (126''-145'') V-LAMBDA (*Mus musculus* IGLV1*01 (81%) –IGLJ1*01/*Homo sapiens* IGLV7-46*01 (77%) –IGLJ3*02) [9.3.9] (146''-254'')-*Homo sapiens* IGHG1*03 {CH1-del, h[C^{5}>S(259'')], CH2[E^{3}>P(272''),L^{4}>V(273'') L^{5}>del,G^{6}>A(274''), S^{37}>K(305'')], CH3[E^{17}>Q(395''),S^{24}>K(402'') (255''-485'') (229-265'':232-268'')-bisdisulfide

STRUCTURAL FORMULA

Heavy chain (anti-IL3RA)

QVQLQQSGAE	VKKPGASVKV	SCKASGYTFT	DYYMKWVKQS	HGKSLEWMGD	50
IIPSNGATFY	NQKFKGKATL	TVDRSTSTAY	MELSSLRSED	TAVYYCARSH	100
LLRASWFAYW	GQGTLVTVSS	ASTKGPSVFP	LAPSSKSTSG	GTAALGCLVK	150
DYFPEPVTVS	WNSGALTSGV	HTFPAVLQSS	GLYSLSSVVT	VPSSSLGTQT	200
YICNVNHKPS	DTKVDKKVEP	KSCDKTHTCP	PCPAPPVAGP	SVFLFPPKPK	250
DTLMISRTPE	VTCVVVDVKH	EDPEVKFNWY	VDGVEVHNAK	TKPREEEYNS	300
TYRVVSVLTV	LHQDWLNGKE	YKCKVSNKAL	PAPIEKTISK	AKGQPREPQV	350
YTLPPSREEM	TKNQVSLTCD	VSGFYPSDIA	VEWESDGQPE	NNYKTTPPVL	400
DSDGSFFLYS	KLTVDKSRWE	QGDVFSCSVM	HEALHNHYTQ	KSLSLSPGK	449

Light chain (anti-IL3RA)

DFVMTQSPDS	LAVSLGERAT	INCKSSQSLL	NTGNQKNYLT	WYQQKPGQPP	50'
KLLIYWASTR	ESGVPDRFTG	SGSGTDFTLT	ISSLQAEDVA	VYYCQNDYSY	100'
PYTFGGGTKL	EIKRTVAAPS	VFIFPPSDEQ	LKSGTASVVC	LLNNFYPREA	150'
KVQWKVDNAL	QSGNSQESVT	EQDSKDSTYS	LSSTLTLSKA	DYEKHKVYAC	200'
EVTHQGLSSP	VTKSFNRGEC				220'

Heavy chain (anti-CD3E)

EVQLVESGGG	LVQPGGSLRL	SCAASGFTFS	TYAMNWVRQA	PGKGLEWVGR	50"
IRSKYNNYAT	YYADSVKGRF	TISRDDSKNT	LYLQMNSLRA	EDTAVYYCVR	100"
HGNFGDSYVS	WFAYWGQGTL	VTVSSGKPGS	GKPGSGKPGS	GKPGSQAVVT	150"
QEPSLTVSPG	GTVTLTCGSS	TGAVTTSNYA	NWVQQKPGKS	PRGLIGGTNK	200"
RAPGVPARFS	GSLLGGKAAL	TISGAQPEDE	ADYYCALWYS	NHWVFGGGTK	250"
LTVLEPKSSD	KTHTCPPCPA	PPVAGPSVFL	FPPKPKDTLM	ISRTPEVTCV	300"
VVDVKHEDPE	VKFNWYVDGV	EVHNAKTKPR	EEQYNSTYRV	VSVLTVLHQD	350"
WLNGKEYKCK	VSNKALPAPI	EKTISKAKGQ	PREPQVYTLP	PSREQMTKNQ	400"
VKLTCLVKGF	YPSDIAVEWE	SNGQPENNYK	TTPPVLDSDG	SFFLYSKLTV	450"
DKSRWQQGNV	FSCSVMHEAL	HNHYTQKSLS	LSPGK		485"

Disulfide bridges location

22-96	22"-98"	23'-94'	140'-200'	147-203	167"-235"	220'-223
229-265"	232-268"	263-323	299"-359"	369-427	405"-463"	

Glycosylation sites (N)

Asn-299 Asn-335"

MOLECULAR FORMULA	$C_{5629}H_{8669}N_{1503}O_{1738}S_{38}$ (non-glycosylated)
MOLECULAR WEIGHT	126.42 kDa (non-glycosylated)
TRADEMARK	None as yet
SPONSOR	Xencor Inc.
CODE DESIGNATIONS	XmAb14045
CAS REGISTRY NUMBER	2138442-13-2
UNII	JD56EJA59S
WHO NUMBER	11021

gbk