

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (KL-194)	LUSVERTIKIMAB
PRONUNCIATION	lus" ver ti' ki mab
THERAPEUTIC CLAIM	Treatment of autoimmune disease, including Ulcerative Colitis and primary Sjögren's syndrome

CHEMICAL NAMES

Immunoglobulin G4 [100-leucine,230-proline,447-proline], anti-(human interleukin-7 receptor subunit α) (human-Rattus norvegicus monoclonal OSE-127 γ -chain), disulfide with [31-glutamine,53-threonine] human-Rattus norvegicus monoclonal OSE-127 κ -chain, dimer

Immunoglobulin G4-kappa, anti-[Homo sapiens IL7R (interleukin 7 receptor, CD127, IL7RA)], humanized monoclonal antibody; gamma4 heavy chain humanized (1-449) [VH (Homo sapiens IGHV3-11*01 (90.8%) -(IGHD) -IGHJ4*01 (100%)) CDR-IMGT [8.8.15] (26-33.51-58.97-111) (1-122)-Homo sapiens IGHG4*01 (100%), G4v5 h P10 (CH1 (123-220), hinge 1-12 S10>P (230) (221-232), CH2 (233-342), CH3 (343-447), CHS (448-449)) (123-449)], (136-214')-disulfide with kappa light chain humanized (1'-214') [V-KAPPA (Homo sapiens IGKV1-NL1*01 (86.3%) -IGKJ4*01 (91.7%)) CDR-IMGT [6.3.9] (27-32.50- 52.89-97) (1'-107') -Homo sapiens IGKC*01 (100%), Km3 A45.1 (153), V101 (191) (108'-214')]; dimer (228-228":231-231")- bisdisulfide, produced in a Chinese hamster ovary (CHO)-K1 cell line, glycoform alfa

STRUCTURAL FORMULA

Heavy chain X, X''

QVQLVESGGG	LVKPGGSLRL	SC AVSGFTLS	DYYMAWIRQA	PGKGLEWVST	50
ISASGLRITY	PDSVKGRFTI	SRDNAKNSLY	LQMNSLRAED	TAVYY C ARPL	100
SAHYGFNYFD	YWQGQTLVTV	SSASTKGPSV	FPLAP C SRST	SESTAALG C L	150
VKDYFPEPVT	VSWNSGALTS	GVHTFPAVLQ	SSGLYSLSSV	VTVPSSSLGT	200
KTYT C NVDHK	PSNTKVDKRV	ESKYGPP C PP	C PAPEFLGGP	SVFLFPPKPK	250
DTLMISRTPE	VT C VVVDVSQ	EDPEVQFNWY	VDGVEVHNAK	TKPREEQ F NS	300
TYRVVSVLTV	LHQDWLNGKE	YK C KVSNKGL	PSSIEKTISK	AKGQPREPQV	350
YTLPPSQEEM	TKNQVSLT C L	VKGFYPSDIA	VEWESNGQPE	NNYKTTTPPVL	400
DSDGSFFLYS	RLTVDKSRWQ	EGNVF C SVM	HEALHNHYTQ	KSLSLSPGK	449

Light chain X', X'''

DIQMTQSPSS	LSASVGDRVT	IT C RTSEDIY	QGLAWYQQKP	GKAPKLLLYS	50'
ANTLHIGVPS	RFSGSGSGTD	YTLTISSLQP	EDFATYY C QQ	YYDYPLAFGG	100'
GTKVEIKRTV	AAPSVFIFPP	SDEQLKSGTA	SVV C LLNNFY	PREAKVQWKV	150'
DNALQSGNSQ	ESVTEQDSKD	STYLSLSTLT	LSKADYEKHK	VYACEVTHQG	200'
LSSPVTKSFN	RGE C				214'

Disulfide bridges (denoted in red, bold text)

22-96	22''-96''	149-205	149''-205''
263-323	263''-323''	369-427	369''-427''
23'-88'	23'''-88'''	134'-194'	134'''-194'''
228-228''	231-231''	136-214'	136''-214''

Glycosylation sites (asparagine 299, both heavy chains, Fucosylated complex bi-antennary CHO-type glycans)

299 299' '

MOLECULAR FORMULA	C ₆₄₈₄ H ₉₉₆₈ N ₁₇₀₈ O ₂₀₂₄ S ₄₄
MOLECULAR WEIGHT	145.6 kDa
TRADEMARK	None as yet
SPONSOR	OSE Immunotherapeutics
CODE DESIGNATIONS	OSE-127
<u>CAS</u> REGISTRY NUMBER	2375835-91-7
UNII	H1V41MWX63
WHO NUMBER	11533

gbk