

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (HI-252) LUTETIUM (Lu177) LILOTOMAB
SATETRAXETAN

PRONUNCIATION loo tee' she um lil "oh toe mab sat" et rax' ee tan

THERAPEUTIC CLAIM radiotherapy for cancer

CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human CD antigen CD37) (*Mus musculus* monoclonal HH1 heavy chain), disulfide with *Mus musculus* monoclonal HH1 light chain, dimer, complex with hydrogen [2-[(4-isothiocyanatophenyl)methyl]-1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetato(4-)- $\kappa N^1, \kappa N^4, \kappa N^7, \kappa N^{10}, \kappa O^1, \kappa O^4, \kappa O^7, \kappa O^{10}$]lutetate(1-)-¹⁷⁷Lu (Source : CAS)
2. Immunoglobulin G1-kappa, anti-[*Homo sapiens* CD37 (TSPAN26, tetraspanin-26)], *Mus musculus* monoclonal antibody, lutetium (Lu 177) radiolabelled satetraxetan (DOTA derivative) conjugate; gamma1 heavy chain (1-443) [*Mus musculus* VH (IGHV1S135*01 (96.90%) -(IGHD)-IGHJ4*01) [8.8.12] (1- 119) -IGHG1*01 (CH1 E84>Q (177), P95>T (193), R96>W (194) (120-216), hinge (217-229), CH2 (230-336), CH3 N84.2>D (395), N84.4>D (397) (337-441), CHS (442-443)) (120-443)], (221-214')-disulfide with kappa light chain (1'-214') [*Mus musculus* V-KAPPA (IGKV6-25*01 (93.70%) - IGKJ4*01) [6.3.9] (1'-107') -IGKC*01 (108'-214')]; dimer (223-223":226-226":228-228")-trisdisulfide, an average of 1 to 2 amino groups (N6 of lysines) are substituted: N-[*rac*-(4-[[[(2R)-1,4,7,10-tetrakis(carboxymethyl)-1,4,7,10-tetraazacyclododecan-2-yl]methyl]phenyl]carbamothioyl)] (¹⁷⁷Lu)lutetium(3+) chelate (Source : WHO pINN list 122)

STRUCTURAL FORMULA

Heavy chain X & X''

EIQLQQSGPE	LVKPGASVKV	SCKASGYSFT	DYNMYWVKQS	HGKSLEWIGY	50
IDPYNGDTTY	NQKFKGKATL	TVDKSSSTAF	IHLNSLTSED	SAVYYCARSP	100
YGHYAMDYWG	QGTSVTVSSA	KTTPPSVYPL	APGSAAQTNS	MVTLGCLVKG	150
YFPEPVTVTW	NSGSLSSGVH	TFFPAVLQSDL	YTLSSSVTVP	SSTWPSETVT	200
CNVAHPASST	KVDKKIVPRD	CGCKPCICTV	PEVSSVFIFP	PKPKDVLITIT	250
LTPKVTCTVVV	DISKDDPEVQ	FSWFVDDVEV	HTAQTQPREE	QFNSTFRSVS	300
ELPIMHQDWL	NGKEFKCRVN	SAAFPAPIEK	TISKTKGRPK	APQVYTIPPP	350
KEQMAKDKVS	LTCMITDFFP	EDITVVEQWN	GQPAENYKNT	QPIMDTDGSY	400
FVYSKLVNQK	SNWEAGNTFT	CSVLHEGLHN	HHTEKSLSHS	PGK	443

Light chain X' & X''

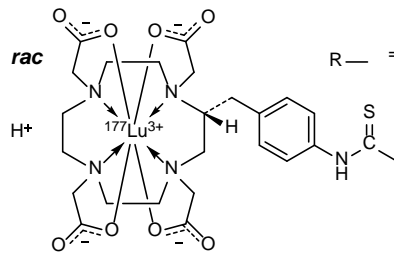
DIVMTQSHKL	LSTSVGDRVS	ITCKASQDVS	TAVDWYQQKP	GQSPKLLINW	50'
ASTRHTGVPD	RFTGSGSGTD	YTLTISSMQA	EDLALYYCRQ	HYSTPFTFGS	100'
GTKLEIKRAD	AAPTVSIFPP	SSEQLTSGGA	SVVCFLNIFY	PKDINVKWKI	150'
DGSERQNGVL	NSWTDQDSKD	STYSMSSTLT	LTKDEYERHN	SYTCEATHKT	200'
STSPIVKSFN	RNEC				214'

Disulfide bridges location

22-96	22"-96"	23'-88'	23""-88""	134'-194'	134""-194""
146-201	146"-201"	214'-221'	214""-221""	223-223"	226-226"
228-228"	257-317	257"-317"	363-421	363"-421"	

Modified residues

K
An average of 1 to 2 are N-substituted by R



Glycosylation sites (N)

Asn-293 Asn-293''

MOLECULAR FORMULA	$C_{6442}H_{9862}N_{1696}O_{2028}S_{54} (C_{24}H_{31}^{177}LuN_5O_8S)_n$
MOLECULAR WEIGHT	146.3 kDa
TRADEMARK	None as yet
SPONSOR	Nordic Nanovector ASA
CODE DESIGNATIONS	¹⁷⁷ Lu-DOTA-HH1, ¹⁷⁷ Lu-tetraxetan-HH1
<u>CAS</u> REGISTRY NUMBER	1453362-90-7
UNII	054ZP16K2Q
WHO NUMBER	10078

gbk