STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (MN-186)	DISITAMAB VEDOTIN
PRONUNCIATION	dye sit' ah mab ve doe' tin
THERAPEUTIC CLAIM	Antineoplastic

CHEMICAL NAMES

Immunoglobulin G1, anti-(human tyrosine kinase receptor ErbB2) (human-Mus musculus monoclonal RC48-270A4023 γ1-chain), disulfide with human-Mus musculus monoclonal RC48-270A4023 κ-chain, dimer, thioether with *N*-[[[4-[[*N*-[6-(3-mercapto-2,5-dioxo-1-pyrrolidinyl)-1-oxohexyl]-L-valyl-N^5-(aminocarbonyl)-L-ornithyl]amino]phenyl]methoxy]carbonyl]-*N*-methyl-L-valyl-*N*-[(1*S*,2*R*)-4-[(2*S*)-2-[(1*R*,2*R*)-3-[[(1*R*,2*S*)-2-hydroxy-1-methyl-2-phenylethyl]amino]-1-methoxy-2-methyl-3-oxopropyl]-1-pyrrolidinyl]-2-methoxy-1-[(1*S*)-1-methylpropyl]-4-oxobutyl]-*N*-methyl-L-valinamide (SciFinder)

Immunoglobulin G1-kappa, anti-[*Homo sapiens* ERBB2 (epidermal growth factor receptor 2, receptor tyrosine-protein kinase erbB-2, EGFR2, HER2, HER-2, p185c-erbB2, NEU, CD340)], humanized monoclonal antibody conjugated to auristatin E; gamma1 heavy chain humanized (1-445) [VH (*Homo sapiens* IGHV1-69-2*01 (83.5%) -(IGHD) -IGHJ1*01 (92.9%)) [8.8.8] (1-115) -*Homo sapiens* IGHG1*03v, G1m3>G1m17, nG1m1 (CH1 R120>K (212) (116-213), hinge (214-228), CH2 (229-338), CH3 E12 (354), M14 (357) (339-443), CHS (444-445)) (116-445)] (218-212')-disulfide with kappa light chain humanized (1'-212') [V-KAPPA (*Homo sapiens* IGKV1-39*01 (83.3%) -IGKJ4*01 (100%))[6.3.7] (1'-105') -*Homo sapiens* IGKC*01 (100%) Km3 A45.1 (151), V101 (189) (106'-212')]; dimer (224-224'':227-227'')-bisdisulfide; conjugated on an average of 4 cysteinyl to monomethylauristatin E (MMAE), via a cleavable maleimidocaproyl-valyl-citrullinyl-*p*aminobenzyloxycarbonyl (mc-val-cit-PABC) type linker (INN)

STRUCTURAL FORMULA

Heavy chain X, X''

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EVQLVQSGAE  VKKPGATVKI   SCKVSGYTFT   DYYIHWVQQA   PGKGLEWMGR      50
VNPDHGDSYY  NQKFKDKATI   TADKSTDTAY   MELSSLRSED   TAVYFCARNY     100
LFDHWGQGTL  VTVSSASTKG   PSVFPLAPSS   KSTSGGTAAL   GCLVKDYFPE     150
PVTVSWNSGA  LTSGVHTFPA   VLQSSGLYSL   SSVVTVPSSS   LGTQTYICNV     200
NHKPSNTKVD  KKVEPKSCDK   THTCPPCPAP   ELLGGPSVFL   FPPKPKDTLM     250
ISRTPEVTCV  VVDVSHEDPE   VKFNWYVDGV   EVHNAKTKPR   EEQYNSTYRV     300
VSVLTVLHQD  WLNGKEYKCK   VSNKALPAPI   EKTISKAKGQ   PREPQVYTLP     350
PSREEMTKNQ  VSLTCLVKGF   YPSDIAVEWE   SNGQPENNYK   TTPPVLDSDG     400
SFFLYSKLTV  DKSRWQQGNV   FSCSVMHEAL   HNHYTQKSLS   LSPGK          450
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Light chain X', X'''

```
DIQMTQSPSS  VSASVGDRVT   ITCKASQDVG   TAVAWYQQKP   GKAPKLLIYW     50
ASIRHTGVPS  RFSGSGSGTD   FTLTISSLQP   EDFATYYCHQ   FATYTFGGGT    100
KVEIKRTVAA  PSVFIFPPSD   EQLKSGTASV   VCLLNNFYPR   EAKVQWKVDN    150
ALQSGNSQES  VTEQDSKDST   YSLSSTLTLS   KADYEKHKVY   ACEVTHQGLS    200
SPVTKSFNRG  EC                                                  250
```

Disulfide bridges location

lntra•H 22-96 142-198 259-319 365-423
22"-96' 142'-198' 259"-319' 365'-423'
lntra-L 23'-88' 132'-19l'
23'"-88' 132'"-192"
lnter-H-L* 218-212' 218"-212"
lnter-H-H* 224-224" 227-227"

N-glycosylation sites
295, 295"

Heavy chain X, X''

```
EVQLVQSGAE  VKKPGATVKI   SCKVSGYTFT   DYYIHWVQQA   PGKGLEWMGR     50
VNPDHGDSYY  NQKFKDKATI   TADKSTDTAY   MELSSLRSED   TAVYFCARNY    100
LFDHWGQGTL  VTVSSASTKG   PSVFPLAPSS   KSTSGGTAAL   GCLVKDYFPE    150
PVTVSWNSGA  LTSGVHTFPA   VLQSSGLYSL   SSVVTVPSSS   LGTQTYICNV    200
NHKPSNTKVD  KKVEPKSCDK   THTCPPCPAP   ELLGGPSVFL   FPPKPKDTLM    250
ISRTPEVTCV  VVDVSHEDPE   VKFNWYVDGV   EVHNAKTKPR   EEQYNSTYRV    300
VSVLTVLHQD  WLNGKEYKCK   VSNKALPAPI   EKTISKAKGQ   PREPQVYTLP    350
PSREEMTKNQ  VSLTCLVKGF   YPSDIAVEWE   SNGQPENNYK   TTPPVLDSDG    400
SFFLYSKLTV  DKSRWQQGNV   FSCSVMHEAL   HNHYTQKSLS   LSPGK         450
```

Light chain X', X'''

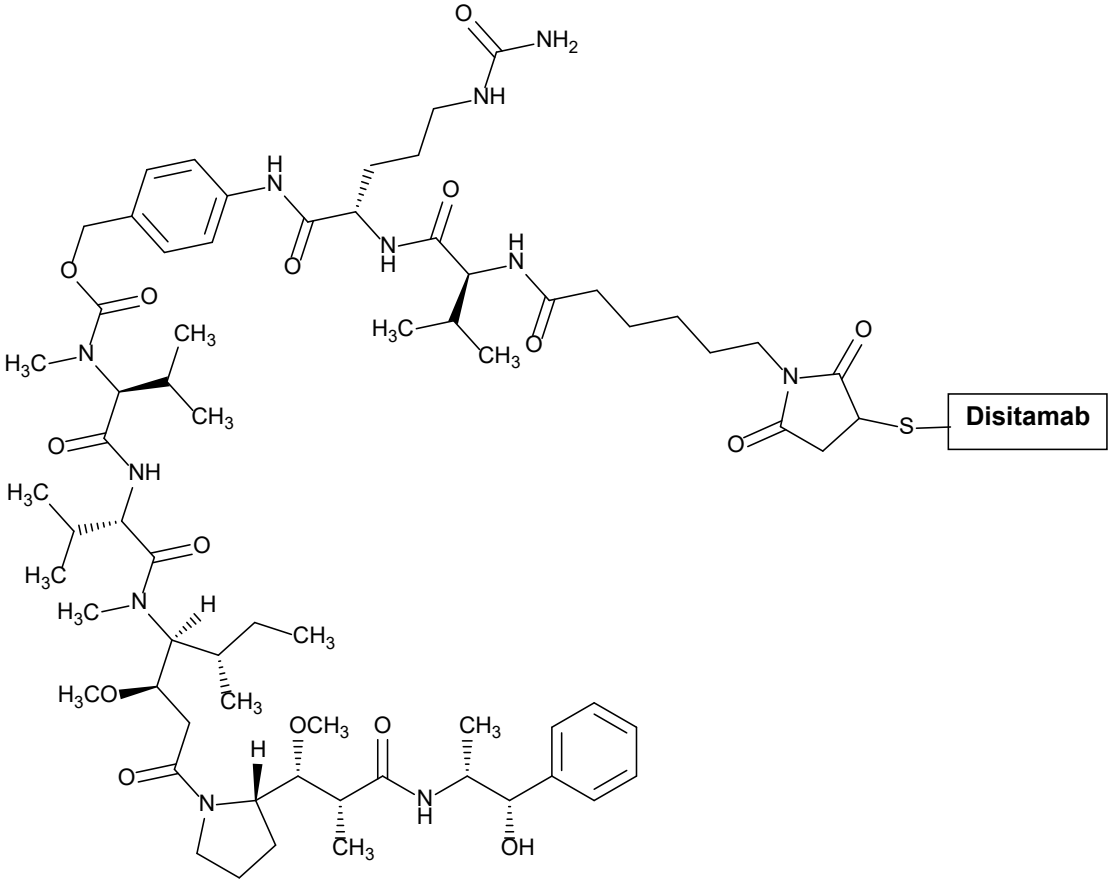
```
DIQMTQSPSS  VSASVGDRVT   ITCKASQDVG   TAVAWYQQKP   GKAPKLLIYW     50
ASIRHTGVPS  RFSGSGSGTD   FTLTISSLQP   EDFATYYCHQ   FATYTFGGGT    100
KVEIKRTVAA  PSVFIFPPSD   EQLKSGTASV   VCLLNNFYPR   EAKVQWKVDN    150
ALQSGNSQES  VTEQDSKDST   YSLSSTLTLS   KADYEKHKVY   ACEVTHQGLS    200
SPVTKSFNRG  EC                                                  250
```

Disulfide bridges location

lntra•H 22-96 142-198 259-319 365-423
22"-96' 142'-198' 259"-319' 365'-423'
lntra-L 23'-88' 132'-19l'
23'"-88' 132'"-192"
lnter-H-L* 218-212' 218"-212"
lnter-H-H* 224-224" 227-227"

N-glycosylation sites
295, 295"

*At least two of the four inter-chain disulfide bridges are not present, an average of 4 cysteinyl being conjugated each via a thioether bond to a drug linker.



MOLECULAR FORMULA	$C_{6414}H_{9890}N_{1698}O_{1998}S_{44}$ (antibody)
MOLECULAR WEIGHT	144.17 kDa
TRADEMARK	None as yet
SPONSOR	Pfizer Inc.
CODE DESIGNATIONS	R48-ADC
CAS REGISTRY NUMBER	2136633-23-1
UNII	RB3U3A1S27
WHO NUMBER	10933

gbk