July 29, 2015

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (cd-14)	DEPATUXIZUMAB MAFODOTIN
PRONUNCIATION	de" pa tux iz' ue mab ma" foe doe' tin
THERAPEUTIC CLAIM	Treatment of cancer

CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human epidermal growth factor receptor) (human-*Mus musculus* monoclonal ABT-806 heavy chain), disulfide with human-*Mus musculus* monoclonal ABT-806 light chain, dimer, tetrakis(thioether) with *N*-[6-(3-mercapto-2,5-dioxo-1-pyrrolidinyl)-1-oxohexyl]-*N*-methyl-L-valyl-L-valyl-(3*R*,4*S*,5*S*)-3-methoxy-5-methyl-4-(methylamino)heptanoyl-(α*R*,β*R*,2*S*)-β-methoxy-α-methyl-2-pyrrolidinepropanoyl-L-phenylalanine

2. Immunoglobulin G1-kappa, anti-(human EGFR protein (Epidermal growth factor receptor)); humanized mouse monoclonal antibody auristatin F conjugate: γ1 heavy chain (1-446) [humanized VH (human IGHV4-30-4*01 (85%) –(IGHD)-IGHJ4*01 (93%)) [9.7.9] (1-116) –human IGHG1*01 (117-446)] (219-214')-disulfide with kappa light chain (1'-214') [humanized V-KAPPA (mouse IGKV14-100*01 (86%) –IGKJ1*01) [6.3.9] (1'-107') –human IGKC*01 (108'-214')] dimer (225-225'':228-228'')-bisdisulfide, an average of two disulfide bridges are reduced and the free thiols are *S*-substituted by (3*S*,6*R*,7*R*,8^{2}*S*,11*R*,12*S*,15*S*,18*S*,26^{3}*RS*)-12-[(2*S*)-butan-2-yl]-3-carboxy-7,11-dimethoxy-6,13,19-trimethyl-5,9,14,17,20,26^{2,5}-heptaoxo-15,18-bis(propan-2-yl)-4,13,16,19-tetraaza-8(2,1),26(1)-dipyrrolidina-1(1)-benzenahexacosaphan-26^{3}-yl radicals (mafodotin)

STRUCTURAL FORMULA

Heavy chain

QVQLQESGPG	LVKPSQTLSL	TCTVSGYSIS	SDFAWNWIRQ	PPGKGLEWMG	50
YISYSGNTRY	QPSLKSRITI	SRDTSKNQFF	LKLNSVTAAD	TATYYCVTAG	100
RGFPYWGQGT	LVTVSSASTK	GPSVFPLAPS	SKSTSGGTAA	LGCLVKDYFP	150
EPVTVSWNSG	ALTSGVHTFP	AVLQSSGLYS	LSSVVTVPSS	SLGTQTYICN	200
VNHKPSNTKV	DKKVEPKSCD	KTHTCPPCPA	PELLGGPSVF	LFPPKPKDTL	250
MISRTPEVTC	VVVDVSHEDP	EVKFNWYVDG	VEVHNAKTKP	REEQYNSTYR	300
VVSVLTVLHQ	DWLNGKEYKC	KVSNKALPAP	IEKTISKAKG	QPREPQVYTL	350
PPSRDELTKN	QVSLTCLVKG	FYPSDIAVEW	ESNGQPENNY	KTTPPVLDSD	400
GSFFLYSKLT	VDKSRWQQGN	VFSCSVMHEA	LHNHYTQKSL	SLSPGK	446

Light chain

DIQMTQSPSS	MSVSVGDRVT	ITCHSSQDIN	SNIGWLQQKP	GKSFKGLIYH	50'
GTNLDDGVPS	RFSGSGSGTD	YTLTISSLQP	EDFATYYCVQ	YAQFPWTFGG	100'
GTKLEIKRTV	AAPSVFIFPP	SDEQLKSGTA	SVVCLLNNFY	PREAKVQWKV	150'
DNALQSGNSQ	ESVTEQDSKD	STYSLSSTLT	LSKADYEKHK	VYACEVTHQG	200'
LSSPVTKSFN	RGEC				214'

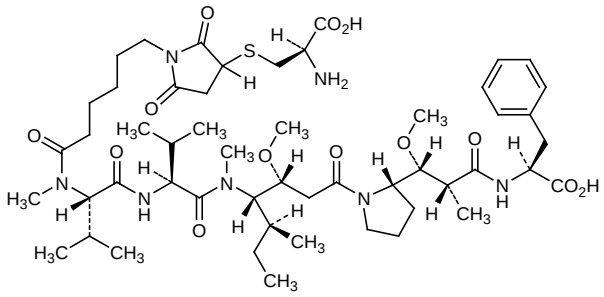
Disulfide bridges location

22-96	22"-96"	23'-88'	23'"-88'"	134'-194'	134'"-194'"	143-199	143"-199"
214'-219*	214'"-219"*	225-225"*	228-228"'*	260-320	260"-320"	366-424	366"-424"

* Partly reduced

Modified residues

C
An average of 2 disulfide bridges are reduced and the free cysteines are *S*-substituted as shown.



Glycosylation sites (N)

Asn-296 Asn-296"

MOLECULAR FORMULA	$C_{6624}H_{10228}N_{1728}O_{2052}S_{42}$. $(C_{49}H_{76}N_6O_{11})_n$ (unglycosylated)
MOLECULAR WEIGHT	148.3 kDa (unglycosylated, *n* = 4)
TRADEMARK	None as yet
SPONSOR	AbbVie
CODE DESIGNATIONS	ABT-414
CAS REGISTRY NUMBER	1585973-65-4
UNII	F3R7A4P04N
WHO NUMBER	10263

gbk