STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (KL-240)	ANVATABART PACTIL
PRONUNCIATION	an vat' a bart pak' til
THERAPEUTIC CLAIM	Antineoplastic

CHEMICAL NAME

Immunoglobulin G1 [121-(4-acetylphenylalanine),de-450-lysine], anti-(human epidermal growth factor receptor HER2) (human-Mus musculus monoclonal Amab788 γ1-chain), disulfide with human-Mus musculus monoclonal Amab788 κ-chain, dimer

STRUCTURAL FORMULA

Heavy chain 1 and 2 (anti-HER2 γ1-chain; X, X')

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EVQLVESGGG  LVQPGGSLRL  SCAASGFNIK  DTYIHWVRQA  PGKGLEWVAR     50
IYPTNGYTRY  ADSVKGRFTI  SADTSKNTAY  LQMNSLRAED  TAVYYCSRWG    100
GDGFYAMDYW  GQGTLVTVSS  XSTKGPSVFP  LAPSSKSTSG  GTAALGCLVK    150
DYFPEPVTVS  WNSGALTSGV  HTFPAVLQSS  GLYSLSSVVT  VPSSSLGTQT    200
YICNVNHKPS  NTKVDKKVEP  KSCDKTHTCP  PCPAPELLGG  PSVFLFPPKP    250
KDTLMISRTP  EVTCVVVDVS  HEDPEVKFNW  YVDGVEVHNA  KTKPREEQYN    300
STYRVVSVLT  VLHQDWLNGK  EYKCKVSNKA  LPAPIEKTIS  KAKGQPREPQ    350
VYTLPPSRDE  LTKNQVSLTC  LVKGFYPSDI  AVEWESNGQP  ENNYKTTPPV    400
LDSDGSFFLY  SKLTVDKSRW  QQGNVFSCSV  MHEALHNHYT  QKSLSLSPG     449
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Note: 121 and 121' is symbolized as "X", this is the non-natural amino acid 4-acetylphenylalanine (pAF), this residue is the site of linker conjugation to the "small molecule drug", via oxime formation when this mAb is used in formation of the antibody drug conjugate described in KL-238 (tentatively assigned the INN name anvatabart opadotin), this controls the "loading" to a Drug/Antibody Ratio (DAR) of 2.

Light chain 1 and 2 (anti-HER2 κ-chain; X", X'")

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DIQMTQSPSS  LSASVGDRVT  ITCRASQDVN  TAVAWYQQKP  GKAPKLLIYS   50''
ASFLYSGVPS  RFSGSRSGTD  FTLTISSLQP  EDFATYYCQQ  HYTTPPTFGQ  100''
GTKVEIKRTV  AAPSVFIFPP  SDEQLKSGTA  SVVCLLNNFY  PREAKVQWKV  150''
DNALQSGNSQ  ESVTEQDSKD  STYSLSSTLT  LSKADYEKHK  VYACEVTHQG  200''
LSSPVTKSFN  RGEC                                          214''
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Disulfide bridges (denoted in red, bold text)

22-96	147-203	223-214''	229-229'
232-232'	264-324	370-428	22'-96'
147'-203'	223'-214'''	264'-324'	370'-428'
23''-88''	134''-194''	23'''-88'''	134'''-194'''

Glycosylation sites (determined by peptide mapping)

300 300'

Lysine clipping occurred on the heavy chains (these are not in the sequence table, removal of the lysines was reported by the firm, and reported in the Chemical Abstracts Registry as part of the name)

450 450'

MOLECULAR FORMULA	$C_{6576}H_{10144}N_{1782}O_{2092}S_{42}$ (formula includes gycosylation as determined by firm)
MOLECULAR WEIGHT	148.23 KDa
TRADEMARK	None as yet
SPONSOR	Ambrx Biopharma
CODE DESIGNATIONS	ARX788 mAb
CAS REGISTRY NUMBER	2636710-06-8
UNII	5YR4B56UBP
WHO NUMBER	12271

gbk