

August 31, 2016

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (DE-160) AVELUMAB  
 PRONUNCIATION a vel' ue mab  
 THERAPEUTIC CLAIM Treatment of cancer

CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human CD antigen CD274) (human monoclonal MSB0010718C heavy chain), disulfide with human monoclonal MSB0010718C light chain, dimer
2. Immunoglobulin G1-lambda 1, anti-(human programmed cell death 1 ligand 1 (PD-L1, B7 homolog 1, CD274 antigen)); human monoclonal antibody:  $\gamma$ 1 heavy chain (1-450) [human VH (*Homo sapiens* IGHV3-23\*01 (91%) –(IGHD)-IGHJ4\*01) [8.8.13] (1-120) -*Homo sapiens* IGHG1\*01 (121-450)], (223-215')-disulfide with  $\lambda$ 1 light chain (1'-216') [human V-LAMBDA (*Homo sapiens* IGLV2-14\*01 (99%) –IGLJ1\*01) [9.3.10] (1'-110') -*Homo sapiens* IGLC1\*02 (111'-216')], dimer (229-229':232-232'')-bisdisulfide

STRUCTURAL FORMULA

Heavy chain

EVQLLESGGG	LVQPGGSLRL	SCAASGFTFS	SYIMMWVRQA	PGKLEWVSS	50
IYPSGGITFY	ADTVKGRFTI	SRDNSKNTLY	LQMNSLRAED	TAVYYCARIK	100
LGTVTTVDYW	GQGTLLTVSS	ASTKGPSVFP	LAPSSKSTSG	GTAALGCLVK	150
DYFPEPVTVS	WNSGALTSKV	HTFPAVLQSS	GLYSLSSVVT	VPSSSLGTQT	200
YICNVNHNKPS	NTKVDKKVEP	KSCDKTHTCP	PCPAPPELLGG	PSVFLFPPPKP	250
KDTLMISRTP	EVTTCVVDVDS	HEDPEVKFNW	YVDGVEVHNA	KTKPREEQYN	300
STYRVVSVLT	VLHQDWLNGK	EYKCKVSNKA	LPAPIEKTIS	KAKGQPREPQ	350
VYTLPPSRDE	LTKNQVSLTC	LVKGFYPSDI	AVEWESNGQP	ENNYKTTTPPV	400
LDSDGSFFLY	SKLTVDKSRW	QQGNVFSCSV	MHEALHNHYT	QKSLSLSPGK	450

Light chain

QSALTQPASV	SGSPGQSITI	SCTGTSSDVG	GYNYVSWYQQ	HPGKAPKLM	50'
YDVSNRPSGV	SNRFGSKSG	NTASLTISGL	QAEDADYYC	SSYTSSTRV	100'
FGTGTKVTVL	GQPKANPTVT	LFPPSSEELQ	ANKATLVCLI	SDFYPGAVTV	150'
AWKADGSPVK	AGVETTKPSK	QSNNKYAASS	YLSLTPEQWK	SHRSYSCQVT	200'
HEGSTVEKTV	APTECS				216'

Disulfide bridges

22-96	22"-96"	22'-90'	22'''-90'''	138'-197'	138'''-197'''	147-203	147"-203"
215'-223'	215'''-223'''	229-229"	232-232"	264-324	264"-324"	370-428	370"-428"

Glycosylation sites (N)

Asn-300 Asn-300"

MOLECULAR FORMULA C<sub>6374</sub>H<sub>9898</sub>N<sub>1694</sub>O<sub>2010</sub>S<sub>44</sub> (non-glycosylated)

MOLECULAR WEIGHT 143.8 kDa (non-glycosylated)

TRADEMARK	None as yet
SPONSOR	Merck KGaA
CODE DESIGNATIONS	MSB0010718C, MSB0010682
<u>CAS</u> REGISTRY NUMBER	1537032-82-8
UNII	KXG2PJ551I
WHO NUMBER	10062

gbk