

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (KL-118) PETOSEMTAMAB
PRONUNCIATION pet'' oh sem' ta mab
THERAPEUTIC CLAIM Treatment of cancer

CHEMICAL NAMES

Immunoglobulin G1 [361-lysine, 376-lysine], anti-(human leucine-rich repeat-containing G protein-coupled receptor LGR5) (human monoclonal MCLA-158 γ 1-chain), disulfide with human monoclonal MCLA-158 κ -chain, (236→229'), (239→232')-bis(disulfide) with immunoglobulin G1 [354-aspartic acid, 371-glutamic acid] anti-(human epidermal growth factor receptor) (human monoclonal MCLA-158 γ 1-chain) disulfide with human monoclonal MCLA-158 κ -chain (Source: CAS)

immunoglobulin G1-kappa, anti-[*Homo sapiens* EGFR (epidermal growth factor receptor, receptor tyrosine-protein kinase erbB-1, ERBB1, HER1, HER-1, ERBB)], and anti-[*Homo sapiens* LGR5 (leucine rich repeat containing G protein-coupled receptor 5, G protein-coupled receptor 49, GPR67, GPR49)], *Homo sapiens* monoclonal antibody, bispecific heterodimeric;
gamma1 heavy chain *Homo sapiens* anti-EGFR (1-449) [VH (*Homo sapiens* IGHV7-4-1*02 (91.8%) -(IGHD) -IGHJ4*01 (93.3%)) [8.8.13] (1-120) -*Homo sapiens* IGHG1*03 (100%), G1m3, nG1m1 (CH1 R120 (217) (121-218), hinge 1-15 (219-233), CH2 (234-343), CH3 L7>D (354), E12 (359), M14 (361), L24>E (371) (344-448), CHS K2>del (449)) (121-449)], (223-214')-disulfide with kappa light chain *Homo sapiens* (1'-214') [V-KAPPA (*Homo sapiens* IGKV1-39*01 (100%) -IGKJ1*01 (100%)) [6.3.9] (1'-107') -*Homo sapiens* IGKC*01 (100%), Km3 A45.1 (153), V101 (191) (108'-214')];
gamma1 heavy chain *Homo sapiens* anti-LGR5 (1-456) [VH (*Homo sapiens* IGHV7-4-1*01 (92.9%) -(IGHD) -IGHJ4*01 (93.3%)) [8.8.20] (1-127) -*Homo sapiens* IGHG1*03 (100%), G1m3, nG1m1 (CH1 R120 (224) (128-225), hinge 1-15 (226-240), CH2 (241-350), CH3 L7>K (361), E12 (366), M14 (368), T22>K (376) (351-455), CHS K2>del (456)) (128-456)], (230-214')-disulfide with kappa light chain *Homo sapiens* (1'-214') [V-KAPPA (*Homo sapiens* IGKV1-39*01 (100%) -IGKJ1*01 (100%)) [6.3.9] (1'-107') -*Homo sapiens* IGKC*01 (100%), Km3 A45.1 (153), V101 (191) (108'-214')]; dimer (229-236'' : 232-239'')-bisdisulfide, produced in Chinese Hamster Ovary (CHO) cells, glycoform alfa
(Source: WHO pINN list 121)

STRUCTURAL FORMULA

Heavy chain X (MF3755)

QVQLVQSSE	LKKPGASVKI	SCKASGYDFT	NYAMNWRQA	PGHGLEWMGW	50
INANTGDPTY	AQGFTGRFVF	SLDTSVSTAY	LQISSLKAED	SAVYYCTRER	100
FLEWLHFDYW	GQGTLLVTVSS	ASTKGPSVFP	LAPSSKSTSG	GTAALGCLVK	150
DYFPEPVTVS	WNSGALTSGV	HTFPAVLQSS	GLYSLSSVVT	VPSSSLGTQT	200
YICNVNHKPS	NTKVDKRVEP	KSCDKTHTCP	PCPAPPELLGG	PSVFLFPPKP	250
KDTLMISRTP	EVTCCVVDVS	HEDPEVKFNW	YVDGVEVHNA	KTKPREEQYN	300
STYRVVSVLT	VLHQDWLNGK	EYKCKVSNKA	LPAPIEKTIS	KAKGQPREPQ	350

VYTDPPSREE	MTKNQVSLTC	EVKGFYPSDI	AVEWESNGQP	ENNYKTTPPV	400
LDSGGSFFLY	SKLTVDKSRW	QQGNVFSCSV	MHEALHNHYT	QKSLSLSPG	450

Light chain X', X''

DIQMTQSPSS	LSASVGDVRT	ITCRASQSSIS	SYLNWYQQKP	GKAPKLLIYA	50'
ASSLQSGVPS	RFSGSGSGTD	FTLTISLQF	EDFATYYCQQ	SYSTPPTFGQ	100'
GTKVEIKRTV	AAPSVFIFPP	SDEQLKSGTA	SVVCLLNIFY	PREAKVQWKV	150'
DNALQSGNSQ	ESVTEQDSKD	STYLSLSTLT	LSKADYEKHK	VYACEVTHQG	200'
LSSPVTKSFN	RGEC				214'

Heavy chain X'' (MF5816)

EVQLVQSGSK	LKKPGASVKV	SCKASGYTFT	SYTMNWVRQA	PGQGLEWMGW	50''
INTDTGDPTY	AQGFTGRFVF	SLDTSVSTAF	LQINSLKAED	TAVYYCARGD	100''
CDSTSCYRYS	YGYEDYWGQG	TLVTVSSAST	KGPSVFPLAP	SSKSTSGGTA	150''
ALGCLVKDYF	PEPVTVSWNS	GALTSGVHTF	PAVLQSSGLY	SLSSVTVVPS	200''
SSLGTQTYIC	NVNHKPSNTK	VDKRVEPKSC	DKTHTCPPCP	APELLGGPSV	250''
FLFPPKPKDT	LMISRTP EVT	CVVVDVSHED	PEVKFNWYVD	GVEVHNAKTK	300''
PREEQYNSTY	RVVSVLTVLH	QDWLNGKEYK	CKVSNKALPA	PIEKTISKAK	350''
GQPREPQVYT	KPPSREEMTK	NQVSLKCLVK	GFYPSDIAVE	WESNGQPENN	400''
YKTTTPVLDS	DGSFFLYSKL	TVDKSRWQQG	NVFSCSVME	ALHNHYTQKS	450''
LSLSPG					456''

Disulfide bridges

22-96	22''-96''	23'-88'	23'''-88'''	101''-106''	134'-194'	134'''-194'''	147-203
154''-210''	223-214'	230''-214'''	229-236''	232-239''	264-324	271''-331''	370-428
377''-435''							

Glycosylation sites (N)

300	307''
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MOLECULAR FORMULA C₆₄₇₉H₉₉₇₂N₁₇₁₄O₂₀₄₀S₄₆

MOLECULAR WEIGHT 148.5 kDa

TRADEMARK None as yet

SPONSOR Merus N.V.

CODE DESIGNATIONS MCLA-158

CAS REGISTRY NUMBER 2213450-26-9

UNII Z6Z6IVE7W4

WHO NUMBER 11136

gbk