

# STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (KL-142) ENOMIMERAN

PRONUNCIATION en oh" mi mer' an

THERAPEUTIC CLAIM Antineoplastic

## CHEMICAL NAME

RNA (recombinant [1,2-[m7Gm-p-[P(R)]-sp-p-G]]-capped human melanoma-associated antigen MAGE3-specifying poly(A)-tailed messenger RBL003.3), inner salt (Source: CAS)

## STRUCTURAL FORMULA

Nucleotide sequence 5' → 3':

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GGGCGAACUA  GUAUUCUUCU  GGUCCCCACA  GACUCAGAGA  GAACCCGCCA  50
CCAUGAGAGU  GAUGGCCCCC  AGAACCCUGA  UCCUGCUGCU  GUCUGGGGCC  100
CUGGCCCCUGA  CAGAGACAUG  GGCCGGAAGC  GGCGGCUCUG  GAGGAGGGCG  150
CUCCGGAGGC  AUGCCCUUUG  AACAGCGCUC  ACAGCACUGC  AAACCUGAGG  200
AGGGCCUUGA  AGCAAGGGGC  GAAGCUCUGG  GGUUGGUCGG  UGCACAAGCA  250
CCCGCCACUG  AGGAACAGGA  AGCCGCGUCU  AGCUCAUCAA  CCCUGGUUGA  300
AGUGACACUG  GCGAAGUGC  CUGCUCGGGA  GAGUCCAGAC  CCUCCCCAGU  350
CCCCUCAAGG  CGCUUCUAGC  CUGCCUACCA  CGAUGAACUA  CCCACUGUGG  400
UCACAGAGCU  AUGAGGACAG  UUCCAAUCAA  GAAGAAGAAG  GCCCGUCUAC  450
CUUCCCCGAU  CUUGAGUCCG  AGUUUCAGGC  CGCUCUGUCC  CGGAAGGUGG  500
CAGAGCUCGU  GCACUUUCUC  CUGUUGAAGU  AUCGAGCCCG  GGAGCUGUC  550
ACUAAAGCCG  AAUAGCGGG  CUCUGUAGUG  GGGAAUUGGC  AGUAUUUCUU  600
CCCCGUGAUC  UUCAGCAAAG  CCUCCAGCAG  CCUGCAAUUG  GUGUUCGGUA  650
UUGAACUGAU  GGAAGUAGAU  CCGAUUGGGC  AUCUGUACAU  CUUUGCGACA  700
UGUCUGGGAC  UGUCCUAUGA  CGGACUGCUC  GGGGAUAACC  AGAUUAUGCC  750
GAAAGCCGGU  CUGCUGAUCA  UAGUUCUCGC  CAUCAUUGCC  AGAGAGGGAG  800
AUUGUGCUC  AGAGGAGAAG  AUCUGGGAGG  AAUUGUCUGU  GCUGGAGGUC  850
UUUGAGGGUA  GGGAGGACAG  CAUUCUCGGC  GAUCCCAAGA  AACUCCUGAC  900
CCAGCACUUU  GUCCAGGAGA  ACUACCUCGA  AUACAGACAG  GUCCAGGCA  950
GUGACCCUGC  UUGCUCAGAG  UUCUUUUGG  GACCCCGUGC  AUUGGUAGAG  1000
ACAAGCUAUG  UCAAAGUGCU  GCACCAUAUG  GUGAAGAUAU  CUGGAGGACC  1050
ACACAUCAGU  UACCCACCCC  UUCAUGAGUG  GGUUCUGCGC  GAAGGGGAGG  1100
AGGGAGGAUC  CGGUGGUGGC  GGCAGCGGCG  GCAAGAAGCA  GUACAUCAAG  1150
GCCAACAGCA  AGUUAUCGG  CAUCACCGAG  CUGAAGAAGC  UGGGAGGGGG  1200
CAAACGGGGA  GCGGCAAAA  AGAUGACCAA  CAGCGUGGAC  GACGCCUGA  1250
UCAACAGCAC  CAAGAUCUAC  AGCUACUUC  CCAGCGUGAU  CAGCAAAGUG  1300
AACCAGGGCG  CUCAGGGCAA  GAAACUGGGC  UCUAGCGGAG  GGGGAGGCUC  1350
UCCUGGCGGG  GGAUCUAGCA  UCGUGGGAAU  UGUGGCAGGA  CUGGCAGUGC  1400
UGGCCGUGGU  GGUGAUCGGA  GCCGUGGUGG  CUACCGUGAU  GUGCAGACGG  1450
AAGUCCAGCG  GAGGCAAGGG  CGGCAGCUAC  AGCCAGGCCG  CCAGCUCUGA  1500
UAGCGCCAG  GCGAGCGACG  UGUCACUGAC  AGCCUAGUAA  CUCGAGCUGG  1550
UACUGCAUGC  ACGCAAUGCU  AGCUGCCCCU  UUCCCGUCCU  GGGUACCCCG  1600
AGUCUCCCC  GACCUCGGGU  CCCAGGUAUG  CUCCCACCUC  CACCUGCCCC  1650
ACUCACCACC  UCUGCUAGUU  CCAGACACCU  CCCAAGCACG  CAGCAAUGCA  1700
GCUCAAAACG  CUUAGCCUAG  CCACACCCCC  ACGGGAACA  GCAGUGAUUA  1750
ACCUUUAGCA  AUAAACGAAA  GUUUAAUCAA  GCUAUACUAA  CCCCAGGGUU  1800
GGUCAUUUC  GUGCCAGCCA  CACCGAGACC  UGUCCAGAG  UCGCUAGCCG  1850
CGUCGUAAA  AAAAAAAAAA  AAAAAAAAAA  AAAAAAAAAA  UAUGCUAAA  1900
AAAAAAAAA  AAAAAAAAAA  AAAAAAAAAA  AAAAAAAAAA  AAAAAAAAAA  1950
AAAAAAAAA  AAAAAAA  1967
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<b>Feature</b>	<b>Description</b>	<b>Position</b>
<b>Capping Structure</b>	phosphorothioate stabilized cap analogue	1
<b>hAg-Kozak</b>	human ct-globin - Kozak region	2-52
<b>Sec</b>	secretion signal sequence.	53-130
<b>GS-rich linkers</b>	Sequences that code for short linker peptides generally consisting of the amino acids glycine and serine	131-160, 1103-1132 and 1328-1369
<b>MAGE-A3</b>	Codon-optimized sequences encoding the protein MAGE-A3	161-1102
<b>P2P16</b>	Sequence coding for tetanus toxoid-derived helper epitopes	1133-1327
<b>MITD</b>	transmembrane and cytoplasmic domains of MHC class I molecule	1370-1540
<b>FI</b>	sequence element derived of the amino terminal enhancer of splitRNA (F) and from the mitochondrially encoded I2S RNA (I)	1541-1857
<b>Poly(A)</b>	A poly(A)-tail measuring 110 nucleotides in length.	1858-1967

**MOLECULAR FORMULA** C<sub>18795</sub>H<sub>23266</sub>N<sub>7709</sub>O<sub>13606</sub>P<sub>1969</sub>S

**MOLECULAR WEIGHT** 635.9 kDa

**TRADEMARKS** None yet

**SPONSOR** BioNTech SE

**CODE DESIGNATIONS** RBL003.3

**CAS REGISTRY NUMBER** 2348560-99-4

**UNII** Q2IVF76ER2

**WHO NUMBER** 11479

**SCS**