

January 28, 2015

## STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (AB-142) TREVOGRUMAB

PRONUNCIATION trev" oh groo' mab

THERAPEUTIC CLAIM Treatment of muscle atrophy due to orthopedic disuse and sarcopenia

CHEMICAL NAMES

1. Immunoglobulin, anti-(human growth differentiation factor 8) (human REGN1033 heavy chain), disulfide with human REGN1033  $\kappa$ -chain, dimer
2. Immunoglobulin G4-kappa, anti-(human growth/differentiation factor 8 (myostatin)); human monoclonal antibody;  $\gamma$ 4 heavy chain (1-447) [human VH (IGHV3-23\*01 (94%) –IGHJ6\*01) [8.8.13] (1-120) –IGHG4\*01 (CH1 (121-218), hinge S<sup>10</sup>>P<sup>(228)</sup> (219-230), CH2 (231-340), CH3 (341-447)) (121-447)] (134-214')-disulfide with  $\kappa$  light chain (1'-214') [human V-KAPPA (IGKV1-27\*01 (90.5%) –IGKJ4\*01) [6.3.9] (1'-107') –IGKC\*01(108'-214')] dimer (226-226":229-229")-bisdisulfide

## STRUCTURAL FORMULA

## Heavy chain

|            |             |            |            |            |     |
|------------|-------------|------------|------------|------------|-----|
| EVQVLESGGD | LVQPPGSLRL  | SCAASGFTFS | AYAMTWVRQA | PGKGLEWVSA | 50  |
| ISGSGGSAYY | ADSVKGRFTI  | SRDNSKNTVY | LQMNSLRAED | TAVYYCAKDG | 100 |
| AWKMSGLDVW | GQGTTVIVSS  | ASTKGPSVFP | LAPCSRSTSE | STAALGCLVK | 150 |
| DYFPEPVTVS | WNSGALTSGV  | HTFPAVLQSS | GLYSLSSVVT | VPSSSLGTKT | 200 |
| YTCNVDPKPS | NTKVDKRVES  | KYGPPCPPCP | APEFLGGPSV | FLFPPKPKDT | 250 |
| LMISRTPEVT | CVVVDVSDQED | PEVQFNWYVD | GVEVHNAKTK | PREEQFNSTY | 300 |
| RVVSVLTVLH | QDWLNGKEYK  | CKVSNKGLPS | SIEKTISKAK | GQPREPQVYT | 350 |
| LPSPQEEMTK | NQVSLTCLVK  | GFYPSDIAVE | WESNGQPENN | YKTTTPVLDS | 400 |
| DGSFFLYSRL | TVDKSRWQEG  | NVFSCSVME  | ALHNHYTQKS | LSLSLGK    | 447 |

## Light chain

|            |             |                        |            |            |      |
|------------|-------------|------------------------|------------|------------|------|
| DIQMTQSPAS | LSASVGDRVVT | ITCRASQDIS             | DYLAWYQQKP | GKIPRLLIYT | 50'  |
| TSTLQSGVPS | RFRGSGSGTD  | F <sup>T</sup> LTLSLQP | EDVATYYCQK | YDSAPLTFGG | 100' |
| GTKVEIKRTV | AAPSVFIFPP  | SDEQLKSGTA             | SVVCLLNIFY | PREAKVQWKV | 150' |
| DNALQSGNSQ | ESVTEQDSKD  | STYLSSTLT              | LSKADYEKHK | VYACEVTHQG | 200' |
| LSSPVTKSFN | RGEC        |                        |            |            | 214' |

## Disulfide bridges

|         |           |          |          |          |           |           |           |
|---------|-----------|----------|----------|----------|-----------|-----------|-----------|
| 22-96   | 22"-96"   | 23'-88'  | 23"-88"  | 134-214' | 134'-194' | 134"-214" | 134"-194" |
| 147-203 | 147"-203" | 226-226" | 229-229" | 261-321  | 261"-321" | 367-425   | 367"-425" |

## Glycosylation sites (N)

Asn-297 Asn-297"

MOLECULAR FORMULA C<sub>6374</sub>H<sub>9884</sub>N<sub>1696</sub>O<sub>2018</sub>S<sub>46</sub> (peptide)

MOLECULAR WEIGHT 144.0 kDa (nonglycosylated)

TRADEMARK None as yet

SPONSOR Regeneron Pharmaceuticals, Inc.

CODE DESIGNATIONS REGN1033

CAS REGISTRY NUMBER 1429201-24-0

UNII 87T4327873

WHO NUMBER 10087

gbk