

# LISTADO DE SECUENCIAS

<110> Research Institute at Nationwide Children's Hospital  
 <120> PRODUCTOS Y MÉTODOS DE VIRUS ADENOASOCIADO RECOMBINANTE  
 PARA EL TRATAMIENTO DE LA DISTROFIA MUSCULAR DE CINTURAS 2A  
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His Lys Lys Cys Leu Glu Lys Lys Val Leu Tyr Val Asp Pro Glu Phe  
65 70 75 80

Pro Pro Asp Glu Thr Ser Leu Phe Tyr Ser Gln Lys Phe Pro Ile Gln  
85 90 95

Phe Val Trp Lys Arg Pro Pro Glu Ile Cys Glu Asn Pro Arg Phe Ile  
100 105 110

Ile Asp Gly Ala Asn Arg Thr Asp Ile Cys Gln Gly Glu Leu Gly Asp  
115 120 125

Cys Trp Phe Leu Ala Ala Ile Ala Cys Leu Thr Leu Asn Gln His Leu  
130 135 140

Leu Phe Arg Val Ile Pro His Asp Gln Ser Phe Ile Glu Asn Tyr Ala  
145 150 155 160

Gly Ile Phe His Phe Gln Phe Trp Arg Tyr Gly Glu Trp Val Asp Val  
165 170 175

Val Ile Asp Asp Cys Leu Pro Thr Tyr Asn Asn Gln Leu Val Phe Thr  
180 185 190

Lys Ser Asn His Arg Asn Glu Phe Trp Ser Ala Leu Leu Glu Lys Ala

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 195 |     |     |     |     |     |     |     | 200 |     |     |     |     |     |     |     | 205 |
| Tyr | Ala | Lys | Leu | His | Gly | Ser | Tyr | Glu | Ala | Leu | Lys | Gly | Gly | Asn | Thr |     |
| 210 |     |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |     |
| Thr | Glu | Ala | Met | Glu | Asp | Phe | Thr | Gly | Gly | Val | Ala | Glu | Phe | Phe | Glu |     |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |     |
| Ile | Arg | Asp | Ala | Pro | Ser | Asp | Met | Tyr | Lys | Ile | Met | Lys | Lys | Ala | Ile |     |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |     |
| Glu | Arg | Gly | Ser | Leu | Met | Gly | Cys | Ser | Ile | Asp | Asp | Gly | Thr | Asn | Met |     |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |     |
| Thr | Tyr | Gly | Thr | Ser | Pro | Ser | Gly | Leu | Asn | Met | Gly | Glu | Leu | Ile | Ala |     |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |     |
| Arg | Met | Val | Arg | Asn | Met | Asp | Asn | Ser | Leu | Leu | Gln | Asp | Ser | Asp | Leu |     |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |     |
| Asp | Pro | Arg | Gly | Ser | Asp | Glu | Arg | Pro | Thr | Arg | Thr | Ile | Ile | Pro | Val |     |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |     |
| Gln | Tyr | Glu | Thr | Arg | Met | Ala | Cys | Gly | Leu | Val | Arg | Gly | His | Ala | Tyr |     |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |     |
| Ser | Val | Thr | Gly | Leu | Asp | Glu | Val | Pro | Phe | Lys | Gly | Glu | Lys | Val | Lys |     |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |     |
| Leu | Val | Arg | Leu | Arg | Asn | Pro | Trp | Gly | Gln | Val | Glu | Trp | Asn | Gly | Ser |     |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |     |
| Trp | Ser | Asp | Arg | Trp | Lys | Asp | Trp | Ser | Phe | Val | Asp | Lys | Asp | Glu | Lys |     |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |     |
| Ala | Arg | Leu | Gln | His | Gln | Val | Thr | Glu | Asp | Gly | Glu | Phe | Trp | Met | Ser |     |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |     |
| Tyr | Glu | Asp | Phe | Ile | Tyr | His | Phe | Thr | Lys | Leu | Glu | Ile | Cys | Asn | Leu |     |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |     |

Thr Ala Asp Ala Leu Gln Ser Asp Lys Leu Gln Thr Trp Thr Val Ser  
420 425 430

Val Asn Glu Gly Arg Trp Val Arg Gly Cys Ser Ala Gly Gly Cys Arg  
435 440 445

Asn Phe Pro Asp Thr Phe Trp Thr Asn Pro Gln Tyr Arg Leu Lys Leu  
450 455 460

Leu Glu Glu Asp Asp Asp Pro Asp Asp Ser Glu Val Ile Cys Ser Phe  
465 470 475 480

Leu Val Ala Leu Met Gln Lys Asn Arg Arg Lys Asp Arg Lys Leu Gly  
485 490 495

Ala Ser Leu Phe Thr Ile Gly Phe Ala Ile Tyr Glu Val Pro Lys Glu  
500 505 510

Met His Gly Asn Lys Gln His Leu Gln Lys Asp Phe Phe Leu Tyr Asn  
515 520 525

Ala Ser Lys Ala Arg Ser Lys Thr Tyr Ile Asn Met Arg Glu Val Ser  
530 535 540

Gln Arg Phe Arg Leu Pro Pro Ser Glu Tyr Val Ile Val Pro Ser Thr  
545 550 555 560

Tyr Glu Pro His Gln Glu Gly Glu Phe Ile Leu Arg Val Phe Ser Glu  
565 570 575

Lys Arg Asn Leu Ser Glu Glu Val Glu Asn Thr Ile Ser Val Asp Arg  
580 585 590

Pro Val Lys Lys Lys Lys Thr Lys Pro Ile Ile Phe Val Ser Asp Arg  
595 600 605

Ala Asn Ser Asn Lys Glu Leu Gly Val Asp Gln Glu Ser Glu Glu Gly  
610 615 620

Lys Gly Lys Thr Ser Pro Asp Lys Gln Lys Gln Ser Pro Gln Pro Gln

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 625 |     |     |     |     | 630 |     |     |     |     |     | 635 |     |     |     |     | 640 |
| Pro | Gly | Ser | Ser | Asp | Gln | Glu | Ser | Glu | Glu | Gln | Gln | Gln | Phe | Arg | Asn |     |
|     |     |     |     | 645 |     |     |     |     | 650 |     |     |     |     | 655 |     |     |
| Ile | Phe | Lys | Gln | Ile | Ala | Gly | Asp | Asp | Met | Glu | Ile | Cys | Ala | Asp | Glu |     |
|     |     |     | 660 |     |     |     |     | 665 |     |     |     |     | 670 |     |     |     |
| Leu | Lys | Lys | Val | Leu | Asn | Thr | Val | Val | Asn | Lys | His | Lys | Asp | Leu | Lys |     |
|     |     | 675 |     |     |     |     | 680 |     |     |     |     | 685 |     |     |     |     |
| Thr | His | Gly | Phe | Thr | Leu | Glu | Ser | Cys | Arg | Ser | Met | Ile | Ala | Leu | Met |     |
|     | 690 |     |     |     |     | 695 |     |     |     |     | 700 |     |     |     |     |     |
| Asp | Thr | Asp | Gly | Ser | Gly | Lys | Leu | Asn | Leu | Gln | Glu | Phe | His | His | Leu |     |
| 705 |     |     |     |     | 710 |     |     |     |     | 715 |     |     |     |     | 720 |     |
| Trp | Asn | Lys | Ile | Lys | Ala | Trp | Gln | Lys | Ile | Phe | Lys | His | Tyr | Asp | Thr |     |
|     |     |     |     | 725 |     |     |     |     | 730 |     |     |     |     | 735 |     |     |
| Asp | Gln | Ser | Gly | Thr | Ile | Asn | Ser | Tyr | Glu | Met | Arg | Asn | Ala | Val | Asn |     |
|     |     |     | 740 |     |     |     |     | 745 |     |     |     |     | 750 |     |     |     |
| Asp | Ala | Gly | Phe | His | Leu | Asn | Asn | Gln | Leu | Tyr | Asp | Ile | Ile | Thr | Met |     |
|     |     | 755 |     |     |     |     | 760 |     |     |     |     | 765 |     |     |     |     |
| Arg | Tyr | Ala | Asp | Lys | His | Met | Asn | Ile | Asp | Phe | Asp | Ser | Phe | Ile | Cys |     |
|     | 770 |     |     |     |     | 775 |     |     |     |     | 780 |     |     |     |     |     |
| Cys | Phe | Val | Arg | Leu | Glu | Gly | Met | Phe | Arg | Ala | Phe | His | Ala | Phe | Asp |     |
| 785 |     |     |     |     | 790 |     |     |     |     | 795 |     |     |     |     | 800 |     |
| Lys | Asp | Gly | Asp | Gly | Ile | Ile | Lys | Leu | Asn | Val | Leu | Glu | Trp | Leu | Gln |     |
|     |     |     |     | 805 |     |     |     |     | 810 |     |     |     |     | 815 |     |     |
| Leu | Thr | Met | Tyr | Ala |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 820 |     |     |     |     |     |     |     |     |     |     |     |     |     |

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<223> Cebador sintético

<400> 8

cgagagcaa ctgcataag

19

<210> 9

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20