

LISTADO DE SECUENCIAS

<110> INOVIO PHARMACEUTICALS, INC.
THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY

<120> VACUNAS CONTRA EL CORONAVIRUS Y MÉTODOS DE USO

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Phe Arg Ser Ser Val Leu His Ser Thr Gln Asp Leu Phe Leu Pro Phe
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Phe Ser Asn Val Thr Trp Phe His Ala Ile His Val Ser Gly Thr Asn
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Gly Thr Lys Arg Phe Asp Asn Pro Val Leu Pro Phe Asn Asp Gly Val
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Tyr Phe Ala Ser Thr Glu Lys Ser Asn Ile Ile Arg Gly Trp Ile Phe
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Gly Thr Thr Leu Asp Ser Lys Thr Gln Ser Leu Leu Ile Val Asn Asn
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Ala Thr Asn Val Val Ile Lys Val Cys Glu Phe Gln Phe Cys Asn Asp
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Pro Phe Leu Gly Val Tyr Tyr His Lys Asn Asn Lys Ser Trp Met Glu
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Ser Glu Phe Arg Val Tyr Ser Ser Ala Asn Asn Cys Thr Phe Glu Tyr
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Val Ser Gln Pro Phe Leu Met Asp Leu Glu Gly Lys Gln Gly Asn Phe
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Lys Asn Leu Arg Glu Phe Val Phe Lys Asn Ile Asp Gly Tyr Phe Lys
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Ile Tyr Ser Lys His Thr Pro Ile Asn Leu Val Arg Asp Leu Pro Gln
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Pro Gly Asp Ser Ser Ser Gly Trp Thr Ala Gly Ala Ala Tyr Tyr
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Val Gly Tyr Leu Gln Pro Arg Thr Phe Leu Leu Lys Tyr Asn Glu Asn
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Gly Thr Ile Thr Asp Ala Val Asp Cys Ala Leu Asp Pro Leu Ser Glu
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Thr Lys Cys Thr Leu Lys Ser Phe Thr Val Glu Lys Gly Ile Tyr Gln
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Thr Ser Asn Phe Arg Val Gln Pro Thr Glu Ser Ile Val Arg Phe Pro
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Ala Asp Tyr Ser Val Leu Tyr Asn Ser Ala Ser Phe Ser Thr Phe Lys

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375

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Cys Tyr Gly Val Ser Pro Thr Lys Leu Asn Asp Leu Cys Phe Thr Asn
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Pro Thr Asn Phe Thr Ile Ser Val Thr Thr Glu Ile Leu Pro Val Ser
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810

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Asp Ile Ala Ala Arg Asp Leu Ile Cys Ala Gln Lys Phe Asn Gly Leu
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Ala Pro Ala Ile Cys His Asp Gly Lys Ala His Phe Pro Arg Glu
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Phe Arg Ser Ser Val Leu His Ser Thr Gln Asp Leu Phe Leu Pro Phe
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Phe Ser Asn Val Thr Trp Phe His Ala Ile His Val Ser Gly Thr Asn
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Gly Thr Lys Arg Phe Asp Asn Pro Val Leu Pro Phe Asn Asp Gly Val
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Ala Thr Asn Val Val Ile Lys Val Cys Glu Phe Gln Phe Cys Asn Asp
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Pro Phe Leu Gly Val Tyr Tyr His Lys Asn Asn Lys Ser Trp Met Glu
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Ser Glu Phe Arg Val Tyr Ser Ser Ala Asn Asn Cys Thr Phe Glu Tyr
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Val Ser Gln Pro Phe Leu Met Asp Leu Glu Gly Lys Gln Gly Asn Phe
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Lys Asn Leu Arg Glu Phe Val Phe Lys Asn Ile Asp Gly Tyr Phe Lys
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Ile Tyr Ser Lys His Thr Pro Ile Asn Leu Val Arg Asp Leu Pro Gln
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Gly Phe Ser Ala Leu Glu Pro Leu Val Asp Leu Pro Ile Gly Ile Asn
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Ile Thr Arg Phe Gln Thr Leu Leu Ala Leu His Arg Ser Tyr Leu Thr
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Pro Gly Asp Ser Ser Ser Gly Trp Thr Ala Gly Ala Ala Tyr Tyr
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Val Gly Tyr Leu Gln Pro Arg Thr Phe Leu Leu Lys Tyr Asn Glu Asn
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Gly Thr Ile Thr Val Ala Val Ala Cys Ala Leu Asp Pro Leu Ser Glu
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Thr Lys Cys Thr Leu Lys Ser Phe Thr Val Glu Lys Gly Ile Tyr Gln
305 310 315 320

Thr Ser Asn Phe Arg Val Gln Pro Thr Glu Ser Ile Val Arg Phe Pro
325 330 335

Asn Ile Thr Asn Leu Cys Pro Phe Gly Glu Val Phe Asn Ala Thr Arg
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Phe Ala Ser Val Tyr Ala Trp Asn Arg Lys Arg Ile Ser Asn Cys Val
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Ala Asp Tyr Ser Val Leu Tyr Asn Ser Ala Ser Phe Ser Thr Phe Lys
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Cys Tyr Gly Val Ser Pro Thr Lys Leu Asn Asp Leu Cys Phe Thr Asn
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Val Tyr Ala Asp Ser Phe Val Ile Arg Gly Asp Glu Val Arg Gln Ile
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Ala Pro Gly Gln Thr Gly Lys Ile Ala Asp Tyr Asn Tyr Lys Leu Pro
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Asp Asp Phe Thr Gly Cys Val Ile Ala Trp Asn Ser Asn Asn Leu Asp
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Ser Lys Val Gly Gly Asn Tyr Asn Tyr Leu Tyr Arg Leu Phe Arg Lys
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Ala Gly Ser Thr Pro Cys Asn Gly Val Glu Gly Phe Asn Cys Tyr Phe
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Pro Tyr Arg Val Val Val Leu Ser Phe Glu Leu Leu His Ala Pro Ala
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Thr Val Cys Gly Pro Lys Lys Ser Thr Asn Leu Val Lys Asn Lys Cys
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545 550 555 560

Ser Asn Lys Lys Phe Leu Pro Phe Gln Gln Phe Gly Arg Asp Ile Ala
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Asp Thr Thr Asp Ala Val Arg Asp Pro Gln Thr Leu Glu Ile Leu Asp
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Ile Thr Pro Cys Ser Phe Gly Gly Val Ser Val Ile Thr Pro Gly Ala
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Glu Val Pro Val Ala Ile His Ala Asp Gln Leu Thr Pro Thr Trp Arg
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Arg Ala Arg Ser Thr Ala Ser Gln Ser Ile Ile Ala Tyr Thr Met Ser
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Pro Thr Asn Phe Thr Ile Ser Val Thr Thr Glu Ile Leu Pro Val Ser
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Met Thr Lys Thr Ser Val Asp Cys Thr Met Tyr Ile Cys Ser Asp Ser
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Leu Asn Arg Ala Leu Thr Gly Ile Ala Val Glu Gln Asp Lys Asn Thr
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Gln Glu Val Phe Ala Gln Val Lys Gln Ile Tyr Lys Thr Pro Pro Ile
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Lys Pro Ser Lys Arg Ser Phe Ile Glu Asp Leu Leu Phe Asn Lys Val
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Gly Ala Ala Leu Gln Ile Pro Phe Ala Met Gln Met Ala Tyr Arg Phe
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Asn Gly Ile Arg Val Thr Gln Asn Val Leu Tyr Glu Asn Gln Lys Leu
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930 935 940

Ser Ser Thr Ala Ser Ala Leu Gly Lys Leu Gln Asp Val Val Asn Gln
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Ser Thr Ile Ser Ser Val Leu Asn Asp Ile Leu Ser Arg Leu Asp Lys
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Val Leu Gly Gln Ser Lys Arg Val Asp Phe Cys Gly Lys Gly Tyr
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His Leu Met Ser Phe Pro Gln Ser Ala Pro His Gly Val Val Phe
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Leu His Val Thr Tyr Val Pro Ala Gln Glu Lys Asn Phe Thr Thr
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Ala Pro Ala Thr Cys His Asp Gly Lys Ala His Phe Pro Arg Glu
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Ser Gly Asn Cys Asp Val Val Ile Gly Ile Val Asn Asn Thr Val
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Tyr Asp Pro Leu Gln Pro Glu Leu Asp Ser Phe Lys Glu Glu Leu
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Asp Lys Tyr Phe Lys Asn His Thr Ser Pro Asp Val Asp Leu Gly
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Asp Ile Ser Gly Ile Asn Ala Ser Val Val Asn Ile Gln Lys Glu
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Ile Asp Arg Leu Asn Glu Val Ala Lys Asn Leu Asn Glu Ser Leu
1190 1195 1200

Ile Asp Leu Gln Glu Leu Gly Lys Tyr Glu Gln Tyr Ile Lys Trp
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Pro Trp Tyr Ile Trp Leu Gly Phe Ile Ala Gly Leu Ile Ala Ile
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Val Met Val Thr Ile Met Leu Cys Cys Met Thr Ser Cys Cys Ser
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