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# KITS DE DIAGNÓSTICO COVID-19

## Informe de vigilancia tecnológica

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Ministerio de Ciencia,  
Tecnología e Innovación  
**Argentina**

## KITS DE DIAGNÓSTICO COVID-19

### INFORME DE VIGILANCIA TECNOLÓGICA

Elaborado por "Programa Nacional de Vigilancia Tecnológica e Inteligencia Competitiva VINTEC"

Miguel Guagliano - Adriana Sánchez Rico

A continuación, se presentan los resultados de un ejercicio de vigilancia tecnológica en base a documentos de patentes relacionadas con la detección en humanos del virus SARS-COV-2. Se ingresó al motor de búsqueda de patentes PATENTINSPIRATION<sup>1</sup>, y con el juego de sentencias de búsqueda (conformadas por palabras claves y operadores booleanos), filtros relacionados con los campos técnicos y el periodo de tiempo, se identificaron los documentos que se muestran a continuación. Cada documento presenta el número de publicación, el título, la fecha de publicación y el nombre del solicitante. A través del enlace del número de publicación se puede acceder al documento de patente en la base de datos LENS.ORG<sup>2</sup>

Se realizaron búsquedas, con diferentes resultados, se excluyeron las solicitudes relacionadas con la detección del virus en animales y se unificaron los resultados.

<b>Foco de búsqueda:</b>	Kit de detección en humanos del SARS-COV-2 <sup>3</sup>
<b>Campos de búsqueda:</b>	Título y Resumen
<b>Periodo de búsqueda:</b>	2015-2020
<b>Resultados:</b>	42 Documentos
<b>Base de datos para la búsqueda:</b>	PatentInspiration <sup>4</sup>

#### SENTENCIAS DE BÚSQUEDA UTILIZADAS

("COVID 19" OR "SARS-CoV-2" OR "SARS COV (2019-n-COV)" OR "CORONAVIRUS" OR "Coronaviruses" OR "HCoV" OR "Human Coronavirus" OR "CORONAVIRUS 19") AND (("Realtime polymerase chain reaction" OR "RT-PCR" OR "IgM antibodies" OR "IgG antibodies" OR "CRISPR" OR DNA OR RNA OR "gene editing" OR "CLART" OR "RdRp Gene" OR "N Gene" OR Elisa OR "Enzyme linked immunosorbent assay" OR antigen) AND ("diagnosis" OR "diagnostic" OR "testing" OR "test" OR "detection test" OR "detection kit" OR "kit" OR "test kit" OR "testing kit" OR "diagnosis kit" OR "diagnostic kit"))

("COVID-19" OR "SARS-CoV-2" OR "SARS COV (2019-n-COV)" OR "HCoV" OR "Human Coronavirus" OR "CORONAVIRUS 19") AND (("Realtime polymerase chain reaction" OR "RT-PCR" OR "IgM antibodies" OR "IgG antibodies" OR "CRISPR" OR DNA OR RNA OR "gene editing" OR "CLART" OR "RdRp Gene" OR "N Gene" OR Elisa OR "Enzyme linked immunosorbent assay" OR "antigen" OR "protein" OR "antibodies" OR "RNAi") AND ("diagnosis" OR "diagnostic" OR "testing" OR "test" OR "detection test" OR "detection kit" OR "kit" OR "test kit" OR "testing kit" OR "diagnosis kit" OR "diagnostic kit"))

<sup>1</sup> El motor de búsqueda PatentInspiration, contiene documentos de patentes de las oficinas EPO (Oficina Europea de Patentes), USPTO (United States Patent and Trademark Office), China y Corea.

<sup>2</sup> <https://www.lens.org/>

<sup>3</sup> Si es de interés, se puede agregar la detección en animales al foco de búsqueda.

<sup>4</sup> <https://www.patentinspiration.com/>

("COVID-19" OR "SARS-CoV-2" OR "SARS COV (2019-n-COV)" OR "HCoV" OR "Human Coronavirus" OR "CORONAVIRUS 19" OR "MERS-CoV") AND (("Realtime polymerase chain reaction" OR "RT-PCR" OR "IgM antibodies" OR "IgG antibodies" OR "CRISPR" OR DNA OR RNA OR "gene editing" OR "CLART" OR "RdRp Gene" OR "N Gene" OR Elisa OR "Enzyme linked immunosorbent assay" OR "antigen" OR "protein" OR "antibodies" OR "RNAi") AND ("Loop mediated isothermal amplification" OR "recombinase polymerase amplification" OR "nucleic acid lateral flow immunoassay" OR "diagnosis" OR "diagnostic" OR "testing" OR "test" OR "detection test" OR "detection kit" OR "kit" OR "test kit" OR "testing kit" OR "diagnosis kit" OR "diagnostic kit"))

("COVID 19" OR "SARS CoV2" OR "SARS COV (2019-n-COV)" OR "CORONAVIRUS" OR "Coronaviruses" OR "HCoV" OR "Human Coronavirus" OR "CORONAVIRUS 19") AND ("LAMP" OR "Loop mediated isothermal amplification" OR "recombinase polymerase amplification" OR "nucleic acid lateral flow immunoassay" OR "diagnosis" OR "diagnostic" OR "testing" OR "test" OR "detection test" OR "detection kit" OR "kit" OR "test kit" OR "testing kit" OR "diagnosis kit" OR "diagnostic kit") NOT (porcine or bovine or pig or animal or feline or cattle or canine or swine or cat or dog or chicken)

#### DOCUMENTOS ENCONTRADOS

	Nº DE PUBLICACIÓN	TÍTULO	FECHA DE PUBLICACIÓN	SOLICITANTE
1	<a href="#">CN110499391A</a>	RPA primers, probe sets and kit for detecting respiratory viruses	25-nov-19	CHINESE PLA CENTER FOR DISEASE CONTROL & PREVENTION
2	<a href="#">CN110468237A</a>	Primer probe mixed liquid and kit for detecting middle east respiratory syndrome corona virus (MERS-CoV)	18-nov-19	DA AN GENE CO LTD OF SUN YAT SEN UNIV
3	<a href="#">KR102018201B1</a>	Method and kit for detecting batcoronavirus using real-time PCR	05-sep-19	NATIONAL INSTITUTE OF ENVIRONMENTAL RES
4	<a href="#">KR102019008B1</a>	A method for detecting mers coronavirus using mers coronavirus nucleocapsid fusion protein	04-sep-19	KOREA CENTER FOR DISEASE CONTROL AND PREVENTION
5	<a href="#">CN110157839A</a>	Quadruple fluorescence quantitative detection kit for simultaneously detecting four human coronaviruses	22-ago-19	WUXI CUSTOMS DISTR PEOPLES REPUBLIC OF CHINA
6	<a href="#">KR102005685B1</a>	Recombinant vector of MERS-CoV expressing fluorescence protein derived from Korean MERS-CoV and method of preparing the same	31-jul-19	KOREA CENTER FOR DISEASE CONTROL AND PREVENTION
7	<a href="#">KR20190063512A</a>	PCR Method and kit for diagnosis coronavirus using real-time PCR	09-jun-19	YOON HYUN KYU

Datos de contacto:

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8	<a href="#">KR101969696B1</a>	S2 Monoclonal antibodies of specifically binding to spike S2 protein of MERS-CoV	15-abr-19	KOREA CENTER FOR DISEASE CONTROL AND PREVENTION
9	<a href="#">WO2019066389A1</a>	Nc fusion protein comprising n-terminal domain fragment and c-terminal domain fragment of nucleocapsid protein of mers coronavirus, and kit for diagnosing mers coronavirus infection by using same	03-abr-19	KOREA RES INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY
10	<a href="#">KR20190035542A</a>	N- c- nc nc fusion protein comprising n-terminus domain fragments and c-terminus domain fragments of mers-cov nucleocapsid protein and kit for diagnosing infection of mers-cov using the same	02-abr-19	KOREA RES INST BIOSCIENCE & BIOTECHNOLOGY
11	<a href="#">CN109457053A</a>	Primer group, kit and method for detecting respiratory pathogens	11-mar-19	SUZHOU INST NANO TECH & NANO BIONICS CAS
12	<a href="#">CN109371174A</a>	Middle East respiratory syndrome coronavirus fluorescence PCR (polymerase chain reaction) detection kit	21-feb-19	JIANGSU UNINOVO BIOLOGICAL TECH CO LTD
13	<a href="#">CN109355437A</a>	Respiratory pathogen multi-detection reagent kit	18-feb-19	SHANGHAI GENEODX BIOTECHNOLOGY CO LTD
14	<a href="#">JP2018203632A</a>	Monoclonal antibodies and assay kits	26-dec-18	JAPAN HEALTH SCIENCES FOUND
15	<a href="#">KR20180125141A</a>	Primer set for detection of MERS-coronavirus and uses thereof	21-nov-18	NAT UNIV CHUNGBUK IND ACAD COOP FOUND
16	<a href="#">KR101916899B1</a>	SARS MERS Primer for simultaneous detection of SARS-related corona virus and MERS-related corona virus and Detecting method using the same	07-nov-18	KOREA RES INST BIOSCIENCE & BIOTECHNOLOGY

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<b>17</b>	<a href="#">KR101895228B1</a>	Monoclonal antibody against spike protein of middle east respiratory syndrome coronavirus and uses thereof	29-oct-18	KOREA CENTER FOR DISEASE CONTROL AND PREVENTION
<b>18</b>	<a href="#">KR101886272B1</a>	Composition for detection of MERS-CoV detection method comprising the composition and kit thereof	07-ago-18	BIONEER CORP
<b>19</b>	<a href="#">CN108085417A</a>	Yak coronavirus detection kit based on constant temperature isolated fluorescent PCR platform and application thereof	28-may-18	SOUTHWEST UNIV FOR NATIONALITIES
<b>20</b>	<a href="#">CN108060266A</a>	Primer probe set, kit and detection method for detecting SARS-CoV (Severe Acute Respiratory Syndrome Coronavirus) and MERS-CoV (Middle East Respiratory Syndrome Coronavirus)	21-may-18	BEIJING APPLIED BIOLOGICAL TECH CO LTD
<b>21</b>	<a href="#">KR20180052317A</a>	Primer set for detection of MERS-coronavirus and uses thereof	17-may-18	NAT UNIV CHUNGBUK IND ACAD COOP FOUND
<b>22</b>	<a href="#">KR101857684B1</a>	Primers and probe for detection of middle east respiratory syndrome coronavirus and detecting method for middle east respiratory syndrome coronavirus using the same	13-may-18	KOGENE BIOTECH CO LTD
<b>23</b>	<a href="#">KR101857685B1</a>	Primers and probes for simultaneous detection of subtypes of coronavirus and detecting method for coronavirus using the same	13-may-18	KOGENE BIOTECH CO LTD
<b>24</b>	<a href="#">KR101828794B1</a>	A antibody able to neutralize middle east respiratory syndrome coronavirus	12-feb-18	CELLTRION INC
<b>25</b>	<a href="#">CN107557496A</a>	Fluorescent RT-RAA (Reverse Transcription Recombinase Aid Amplification) primer for detecting MERS-CoV (Middle East Respiratory Syndrome Coronavirus), probe and detecting method	08-ene-18	NINGBO INT TRAVEL HEALTH CARE

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26	<a href="#">KR101782862B1</a>	Monoclonal antibody for diagnosing MERS virus and immunochromatographic diagnostic kit	28-sep-17	WONKWANG UNIV CENTER FOR INDUSTRY-ACADEMY COOP
27	<a href="#">CN107022008A</a>	Polypeptides capable of inhibiting human coronavirus infections in a broad spectrum manner, and applications thereof	07-ago-17	UNIV FUDAN
28	<a href="#">CN106868220A</a>	LAMP (loop-mediated isothermal amplification) primer group for amplifying MERS-CoV and kit	19-jun-17	INST PROCESS ENG CAS
29	<a href="#">CN106636454A</a>	Real-time fluorescence multi-RT-PCR (Reverse Transcription-Polymerase Chain Reaction) method for simultaneously detecting human coronaviruses 229e, Oc43, NI63 and Hku1	09-may-17	INST PASTEUR OF SHANGHAI CHINESE ACAD OF SCIENCES
30	<a href="#">KR20170051884A</a>	Molecular beacon for detection of MERS-CoV and uses thereof	11-may-17	SEOUL NAT UNIV HOSPITAL
31	<a href="#">WO2017078421A1</a>	Molecular beacons for detecting middle east respiratory syndrome coronavirus and uses thereof	10-may-17	SEOUL NAT UNIV BUNDANG HOSPITAL
32	<a href="#">CN105734168A</a>	Multiplex PCR detection kit for nucleic acids of twelve respiratory viruses	05-jul-16	NANJING MOKOBIO BIOTECHNOLOGY CO LTD
33	<a href="#">WO2016080591A1</a>	Antibody recognizing nucleocapsid of middle east respiratory syndrome coronavirus and use thereof	25-may-16	BIONOTE INC
34	<a href="#">CN105463129A</a>	Double-fluorescent PCR detection primer, probe, reaction liquid and kit capable of detecting pathogens of respiratory tract	05-abr-16	SHENZHEN INT TRAVEL HEALTHCARE CENTER
35	<a href="#">KR101593641B1</a>	Antibody recognizing nucleocapsid of middle east respiratory syndrome coronavirus and use thereof	11-feb-16	BIONOTE INC
36	<a href="#">CN105112559A</a>	Kit for detecting coronavirus and application of kit	01-dic-15	CAPITALBIO GROUP CO LTD

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<b>37</b>	<a href="#">CN105039598A</a>	Detection kit for ORF1a2 gene of Middle East respiratory syndrome coronavirus	10-nov-15	HEILONGJIANG BOTENG BIOLOG SCIENCE & TECHNOLOGY CO LTD
<b>38</b>	<a href="#">CN105018644A</a>	Respiratory tract pathogen detecting kit	03-nov-15	JIANGSU PROVINCIAL CT FOR DISEASE PREVENTION AND CONTROL
<b>39</b>	<a href="#">CN104911278A</a>	Special primer capable of quickly detecting human coronavirus NL63 as well as kit and application method thereof and applications thereof	15-sep-15	WUXI BRANCH CT JIANGSU INTERNAT TRAVEL HEALTHCARE CT
<b>40</b>	<a href="#">CN104846125A</a>	Fluorescent RT-PCR (reverse transcription-polymerase chain reaction) primers, probe and kit for detecting MERS (Middle East Respiratory Syndrome), and detection method thereof	18-ago-15	SHENZHEN BIOEASY BIOTECHNOLOGIES CO LTD
<b>41</b>	<a href="#">CN104498636A</a>	Universal primer sequence for detecting human coronavirus infection and detection method	07-abr-15	WUXI BRANCH CT OF JIANGSU INTERNAT TRAVEL HEALTHCARE CT
<b>42</b>	<a href="#">CN104447986A</a>	Middle East respiratory syndrome coronavirus (MERS-CoV) neutralizing antibody and preparation method thereof	24-mar-15	CHINESE ACAD INST

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