

# COVID-19

## Protein Target Thesaurus

| ID | CAS RN      | Preferred Name               | Synonyms  |
|----|-------------|------------------------------|---|
| 1  | 141760-45-4 | Proteinase Furin             | Proteinase Furin<br>Furin (enzyme)<br>PACE<br>Furin<br>Paired basic amino acid converting enzyme<br>Paired basic amino acid cleaving enzyme<br>Serine proteinase PACE<br>Saccharomyces cerevisiae gene QDS1 proteinase<br>PACE-furin protease<br>Serine proteinase PCSK3<br>E.C. 3.4.21.75<br>EC 3.4.21.75  |
| 2  | 9026-28-2   | RNA-dependent RNA polymerase | RNA-dependent RNA polymerase<br>Nucleotidyltransferase, ribonucleate, RNA-dependent<br>Ribonucleic acid-dependent ribonucleic acid polymerase<br>Ribonucleic replicase<br>Ribonucleic acid replicase<br>RNA replicase<br>RNA-dependent ribonucleate nucleotidyltransferase<br>Ribonucleic acid-dependent ribonucleate nucleotidyltransferase<br>Q $\beta$ -replicase<br>Ribonucleic synthetase<br>Replicase<br>Replicase, phage f2<br>Replicase, Q $\beta$ -<br>RNA synthetase<br>RNA transcriptase<br>E.C. 2.7.7.48<br>RNA-dependent RNA replicase<br>Transcriptase<br>RNA-directed RNA polymerase<br>Q-Beta replicase<br>RNA-dependent RNA polymerase 3Dpol<br>3D Polymerase<br>Proteins, $\lambda$ 3, of reovirus<br>Hepatitis C virus polymerase<br>HCV polymerase<br>Influenza virus polymerase<br>Influenza virus RNA polymerase<br>EC 2.7.7.48<br>RdRp |

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|----|-------------|-----------------------------------|---|
|    |             |                                   | RNA polymerase, RNA-dependent<br>RNA polymerase, RNA-directed<br>Proteins, RdRp<br>NSP12  |
| 3  | 9029-03-2   | Dihydroorotate oxidase            | Dihydroorotate oxidase<br>Oxidase, dihydroorotate<br>Dihydroorotate dehydrogenase<br>E.C. 1.3.3.1<br>EC 1.3.3.1<br>Dihydroorotic acid dehydrogenase<br>Dihydroorotic acid dehydrogenases<br>Dihydroorotate oxidases<br>Dihydroorotate dehydrogenases<br>Dihydroorotate dehydrogenase (DHODH)<br>EC 1.3.98.1<br>E.C. 1.3.98.1  |
| 4  | 187042-29-1 | Cyclin G-associated kinase        | Cyclin G-associated kinase<br>Kinase (phosphorylating), protein (cyclin G)<br>Cyclin G-dependent protein kinase<br>Protein kinase GAK<br>Gak kinase<br>Gak kinases<br>Cyclin G-dependent protein kinases<br>Cyclin G-associated kinases<br>Gak protein kinases<br>Gak protein kinase<br>GAK<br>Proteins, GAK  |
| 5  | 252212-87-6 | Transmembrane serine proteinase 2 | Transmembrane serine proteinase 2<br>Serine protease 20P1F12/TMPRSS2<br>Proteinase, 20P1F12/TMPRSS2<br>Proteinase TMPRSS2<br>Epitheliasin<br>Serine proteinase TMPRSS2<br>Serine protease TMPRSS2<br>Transmembrane serine protease 2<br>Proteinase, transmembrane serine, 2<br>TMPRSS2<br>Proteins, TMPRSS2<br>Protein TMPRSS2<br>Transmembrane protein TMPRSS2<br>Protease TMPRSS2 |

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|----|-------------|--------------------------------------|---|
|    |             |                                      | Proteins, epitheliasin<br>Proteins, transmembrane, TMPRSS2  |
| 6  | 328404-18-8 | Angiotensin-converting enzyme 2      | Angiotensin-converting enzyme 2<br>Carboxypeptidase, angiotensin-converting enzyme-related<br>Angiotensin-converting enzyme-related carboxypeptidase<br>Carboxypeptidase ACE2<br>ACE2<br>APN 01<br>Angiotensin I converting enzyme II<br>Angiotensin I converting enzyme 2<br>Angiotensin 1 converting enzyme 2<br>Angiotensin 1 converting enzyme II<br>E.C. 3.4.17.23<br>EC 3.4.17.23<br>ACE-II<br>ACE-2<br>Angiotensin-converting enzyme II<br>ACEII |
| 7  | 444185-98-2 | Protein serine/threonine kinase AAK1 | Protein serine/threonine kinase AAK1<br>Kinase (phosphorylating), adaptor-assocd. protein, AAK1<br>Adaptor-associated protein kinase AAK1<br>Adaptor-assocd. kinase 1<br>AAK1<br>Adaptor-associated kinase 1<br>Adaptor-assocd. protein kinase AAK1<br>Protein kinase AAK1<br>AP2-associated kinase 1<br>AP2-assocd. kinase 1 (AAK1)<br>Proteins, AAK1  |
| 8  | 851883-30-2 | Proteinase PLpro                     | Proteinase PLpro<br>Proteinase, PLpro<br>Coronavirus papain-like endopeptidase<br>Papain-like protease PLP2<br>Papain-like protease PLP1<br>Arterivirus papain-like protease<br>Papain-like protease 2<br>Papain-like protease PLpro<br>Protease PLpro<br>Protease, papain-like protease PLP1<br>Papain-like proteinase PLpro<br>Proteinase, papain-like proteinase PLPro<br>Protease, papin-like protease PLP2<br>Papain-like protease 1               |

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|----|--------------|---|---|
| 9  | 1430213-40-3 | RNA-dependent RNA polymerase NS5B       | <p>RNA-dependent RNA polymerase NS5B</p> <p>Nucleotidyltransferase, ribonucleate, RNA-dependent, NS5B</p> <p>Hepatitis C virus polymerase NS5B</p> <p>NS5B</p> <p>Proteins, NS5B</p> <p>Viral nonstructural proteins, NS5B</p> <p>NS5B polymerase</p> <p>NS5B polymerase 1a</p> <p>NS5B polymerase 1b</p> <p>NS5B protein</p> <p>NS5B RNA polymerase</p> <p>NS5B RNA-dependent RNA polymerase</p> <p>RNA-dependent RNA polymerase nonstructural protein 5B</p> <p>RNA-directed RNA polymerase NS5B</p> <p>Viral nonstructural proteins, RNA-directed RNA polymerase NS5B</p> <p>RNA-dependent ribonucleate nucleotidyltransferase NS5B</p> <p>HCV polymerase NS5B</p> <p>Hepatitis C virus RNA-dependent RNA polymerase NS5B</p> <p>HCV RNA-dependent RNA polymerase NS5B</p> <p>HCV RdRp NS5B</p> <p>HCV NS5B</p> <p>Hepatitis C virus RdRp NS5B</p> <p>Hepatitis C virus NS5B</p> |
| 10 | 2266628-10-6 | Coronavirus nonstructural protein NSP10 | <p>Coronavirus nonstructural protein NSP10</p> <p>Coronavirus NSP10/NSP16 methyltransferase</p> <p>2'-O-methyltransferase NSP10/NSP16 complex</p> <p>NSP10/NSP16 complex</p> <p>NSP16/NSP10 complex</p> <p>NSP16/NSP10</p> <p>NSP10/NSP16</p> <p>SARS-CoV non-structural protein 10</p> <p>Coronavirus non-structural protein NSP10</p> <p>Non-structural protein 10</p> <p>NSP10</p> <p>Proteins, NSP10</p> <p>Coronavirus NSP10</p> <p>Coronavirus 2'-O-methyltransferase NSP10/NSP16</p> <p>Nonstructural protein 10</p> <p>Nonstructural proteins, nsp10</p> <p>Coronavirus nonstructural protein 10</p> <p>SARS-coronavirus 2'-O-methyltransferase NSP10/NSP16</p> <p>Viral nonstructural protein NS10 (coronavirus)</p>   |

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|----|--------------|--|--|
| 11 | 2304801-94-1 | mRNA-guanine N7-methyltransferase NSP14 (3'→5' exoribonuclease), coronavirus | mRNA-guanine N7-methyltransferase NSP14 (3'→5' exoribonuclease), coronavirus<br>mRNA-guanine N7-methyltransferase NSP14<br>Proteins, NSP14<br>NSP14<br>Coronavirus NSP14<br>Non-structural protein 14<br>Exoribonuclease NSP14<br>N7-Methyltransferase NSP14<br>N7-MTase NSP14<br>MTase NSP14<br>Coronavirus guanine N7-methyltransferase NSP14<br>Nonstructural protein 14<br>Non-structural protein NSP14<br>Nonstructural protein NSP14<br>Viral proteins, nsp14<br>Coronavirus nonstructural protein 14<br>Coronavirus nonstructural protein NSP14<br>Nonstructural proteins, nsp14<br>SARS-coronavirus guanine N7-methyltransferase NSP14<br>Viral nonstructural protein NS14 (coronavirus) |
| 12 | 2304801-97-4 | RNA-dependent RNA polymerase NSP12, coronavirus                              | RNA-dependent RNA polymerase NSP12, coronavirus<br>RdRp NSP12<br>Coronaviral RdRp NSP12<br>SARS NSP12<br>SARS-CoV NSP12<br>SARS coronavirus nonstructural protein NSP12<br>Coronavirus nonstructural protein NSP12<br>SARS nonstructural protein NSP12<br>SARS coronavirus nonstructural protein 12<br>Coronavirus nonstructural protein 12<br>Nonstructural protein 12<br>RNA polymerase NSP12<br>NSP12<br>Proteins, NSP12<br>SARS-CoV-2 NSP12<br>Severe acute respiratory syndrome coronavirus NSP12<br>Coronavirus RNA-dependent RNA polymerase NSP12<br>Viral nonstructural protein NS12 (coronavirus)<br>RNA-dependent RNA polymerase NS12<br>Coronavirus NSP12<br>Coronaviral RdRp         |

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|----|--------------|--|---|
|    |              |  | SARS RdRp<br>CoV RdRp<br>SARS-CoV-2 RdRp<br>SARS-CoV RdRp<br>Coronavirus RNA-dependent RNA polymerase<br>SARS RNA-dependent RNA polymerase<br>SARS RNA-directed RNA polymerase<br>Coronavirus RNA-directed RNA polymerase<br>SARS-CoV RNA-directed RNA polymerase<br>SARS-CoV-2 RNA-directed RNA polymerase<br>SARS-CoV-2 RNA replicase<br>SARS-CoV RNA replicase<br>SARS RNA replicase<br>CoV RNA replicase<br>Coronavirus RNA replicase<br>Severe acute respiratory syndrome coronavirus RNA replicase<br>CoV replicase<br>SARS-CoV replicase<br>SARS-CoV-2 replicase<br>RNA replicase NSP12  |
| 13 | 2304802-09-1 | Proteinase 3CLpro<br>NSP5, coronavirus | Proteinase 3CLpro NSP5, coronavirus<br>SARS proteinases<br>SARS proteinase NSP5<br>SARS proteinase<br>SARS proteases<br>SARS protease<br>SARS cysteine proteinases<br>SARS cysteine proteinase<br>SARS-CoV Mpro<br>SARS CoV main proteases<br>SARS-CoV main protease<br>SARS CoV 3C-like proteases<br>SARS-CoV 3C-like protease<br>SARS coronavirus proteinases<br>SARS coronavirus proteinase<br>SARS coronavirus proteases<br>SARS coronavirus protease<br>SARS coronavirus main proteinases<br>SARS coronavirus main proteinase<br>Coronavirus picornain-like cysteine proteinase<br>Coronavirus picornain-like cysteine proteinases<br>Coronavirus main proteinases |

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|----|--------|----------------|--|
|    |        |                | Coronavirus main proteinase<br>Coronavirus main proteases<br>Coronavirus main protease Mpro<br>Coronavirus main protease<br>Proteinase 3CLpro NSP5<br>3CLpro NSP5<br>Coronavirus nonstructural protein NSP5<br>Coronavirus nonstructural protein 5<br>Coronavirus NSP5<br>SARS-CoV-2 NSP5<br>SARS-coronavirus nonstructural protein 5<br>SARS-coronavirus nonstructural protein NSP5<br>3-Chymotrypsin-like protease NSP5<br>3-Chymotrypsin-like proteinase NSP5<br>SARS-3-chymotrypsin-like protease NSP5<br>SARS-3-chymotrypsin-like proteinase NSP5<br>Proteinase NSP5<br>Protease NSP5<br>NSP5<br>Proteins, NSP5<br>SARS-CoV-2 3CLpro<br>Severe acute respiratory syndrome coronavirus nonstructural protein 5<br>Severe acute respiratory syndrome coronavirus NSP5<br>Coronavirus proteinase 3CLpro NSP5<br>Coronavirus protease 3CLpro NSP5<br>Coronavirus endopeptidase C30<br>E.C. 3.4.22.69<br>EC 3.4.22.69<br>SARS-CoV-2 main protease<br>SARS coronavirus 3CLpro<br>SARS 3CLpro<br>Coronavirus 3CLpro<br>Coronavirus protease 3CLpro<br>Coronavirus proteinase 3CLpro<br>Coronavirus proteinase NSP5<br>Coronavirus protease NSP5<br>SARS-CoV NSP5<br>SARS-CoV-2 Mpro<br>SARS Mpro<br>Coronavirus Mpro<br>CoV Mpro |

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|----|--------------|------------------------------|---|
| 14 | 218925-73-6  | Proteinase 3CLpro            | Nonstructural protein 5<br>Nonstructural protein NSP5<br>SARS coronavirus nonstructural protein 5<br>Proteinase 3CLpro<br>Proteinase, 3CLpro<br>3C-like proteinase<br>3CL protease<br>3CL proteinase<br>Mpro protease<br>Protease Mpro<br>3CLpro proteinase<br>3C-like protease<br>Proteinase, 3C-like<br>3CLpro<br>3-Chymotrypsin-like protease<br>Viral main proteinase Mpro<br>Main proteinase Mpro<br>3CL proteases<br>3C-like proteinases<br>3C-like proteases<br>3CLpro proteinases<br>3CL proteinases<br>Mpro proteases<br>Proteinase 3CL<br>Protease 3CL<br>Protease, 3C-like |
| 15 | 2374276-48-7 | Primase NSP8,<br>coronavirus | Primase NSP8, coronavirus<br>Severe acute respiratory syndrome coronavirus NSP8<br>SARS-CoV NSP8<br>SARS-coronavirus NSP8<br>SARS coronavirus nonstructural protein 8<br>SARS coronavirus nonstructural protein NSP8<br>Coronavirus nonstructural protein 8<br>Coronavirus nonstructural protein NSP8<br>SARS nonstructural protein NSP8<br>SARS nonstructural protein 8<br>NSP8<br>Proteins, NSP8<br>Coronavirus primase NSP8<br>Viral nonstructural protein NS8 (coronavirus)<br>Coronavirus NSP8   |

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|----|--------------|---|---|
| 16 | 2374276-49-8 | Uridylate-specific endoribonuclease NSP15, coronavirus            | Uridylate-specific endoribonuclease NSP15, coronavirus<br>NendoU/NSP15<br>SARS uridylate-specific endoribonuclease<br>SARS uridylate-specific endoribonuclease NSP15<br>NSP15<br>Proteins, NSP15<br>Coronavirus NendoU NSP15<br>SARS NendoU NSP15<br>SARS coronavirus NendoU NSP15<br>SARS coronavirus NSP15<br>SARS coronavirus uridylate-specific endoribonuclease NSP15<br>SARS coronavirus uridylate-specific endoribonuclease<br>Nonstructural protein 15<br>Nonstructural protein NSP15<br>SARS coronavirus nonstructural protein NSP15<br>SARS coronavirus nonstructural protein 15<br>Coronavirus nonstructural protein 15<br>SARS nonstructural protein 15<br>Severe acute respiratory syndrome coronavirus NSP15<br>Nsp15 endoribonuclease NendoU<br>Endoribonuclease Nsp15<br>Coronavirus NSP15<br>SARS-CoV-2 NendoU<br>SARS-CoV NendoU<br>SARS-CoV NSP15<br>SARS-CoV-2 NSP15<br>Coronavirus uridylate-specific endoribonuclease NSP15<br>Coronavirus U-specific endoribonuclease NSP15<br>CoV uridylate-specific endoribonuclease NSP15<br>Viral nonstructural protein NS15 (coronavirus) |
| 17 | 2374276-50-1 | Uridylate-specific endoribonuclease                               | Uridylate-specific endoribonuclease<br>NendoU<br>Endoribonuclease NendoU<br>Uridylate endoribonuclease<br>U-Specific Nidovirales endoribonuclease (NendoU)<br>U-Specific Nidovirales endoribonuclease<br>Nidovirus endoribonuclease (NendoU)  |
| 18 | 2374276-63-6 | Nucleoside triphosphate phosphatase NSP13 (helicase), coronavirus | Nucleoside triphosphate phosphatase NSP13 (helicase), coronavirus<br>SARS-CoV NSP13 ATPase/NTPase<br>SARS coronavirus NSP13<br>Coronavirus NSP13  |

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|----|--------------|--|--|
|    |              |  | SARS-CoV NSP13<br>NSP13<br>Proteins, NSP13<br>Severe acute respiratory syndrome coronavirus NSP13<br>Severe acute respiratory syndrome coronavirus nonstructural protein 13<br>Nonstructural protein 13<br>Nonstructural protein NSP13<br>RNA helicase NSP13<br>Helicase NSP13 (NTPase)<br>NTPase NSP13<br>SARS-CoV-2 NSP13<br>Coronavirus nucleoside triphosphate phosphatase-helicase NSP13<br>Viral nonstructural protein NS13 (coronavirus)  |
| 19 | 2304802-12-6 | mRNA cap-specific 2'-O-methyltransferase NSP16 (SAM), SARS-coronavirus | mRNA cap-specific 2'-O-methyltransferase NSP16 (SAM), SARS-coronavirus<br>SARS-CoV RNA cap SAM-dependent (nucleoside-2'-O)-methyltransferase NSP16<br>2'-O-MTase NSP16<br>mRNA cap-specific 2'-O-methyltransferase NSP16<br>Proteins, NSP16<br>NSP16<br>Coronavirus NSP16<br>S-adenosylmethionine-dependent 2'-O-methyltransferase NSP16<br>Coronavirus non-structural protein 16<br>Coronavirus NSP10/NSP16 methyltransferase<br>Severe acute respiratory syndrome coronavirus nsp16 protein<br>SARS-CoV nsp16<br>SARS-CoV non-structural protein 16<br>Non-structural protein 16<br>Non-structural protein NSP16<br>2'-O-methyltransferase NSP10/NSP16 complex<br>NSP10/NSP16 complex<br>NSP10/NSP16<br>NSP16/NSP10<br>Coronavirus 2'-O-methyltransferase NSP16<br>Coronavirus nonstructural protein 16<br>Nonstructural protein 16<br>Nonstructural proteins, nsp16<br>Nonstructural protein NSP16<br>Viral proteins, NSP16 |

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|----|--------------|--------------------------------------|---|
|    |              |                                      | Coronavirus nonstructural protein NSP16<br>SARS-coronavirus 2'-O-methyltransferase NSP16<br>SARS-coronavirus 2'-O-methyltransferase NSP10/NSP16<br>Coronavirus 2'-O-methyltransferase NSP10/NSP16<br>Viral nonstructural protein NS16 (coronavirus)   |
| 20 | 2374276-51-2 | Primase NSP7, coronavirus            | Primase NSP7, coronavirus<br>Coronavirus nonstructural protein 7<br>Coronavirus nonstructural protein NSP7<br>SARS-CoV-2 NSP7<br>SARS-CoV NSP7<br>Coronavirus NSP7<br>SARS-coronavirus NSP7<br>Primase NSP7<br>SARS-coronavirus primase NSP7<br>Coronavirus primase NSP7<br>Severe acute respiratory syndrome coronavirus NSP7<br>NSP7<br>Proteins, NSP7<br>Viral proteins, NSP7<br>Viral nonstructural proteins, NSP7<br>Viral nonstructural protein NSP7<br>Nonstructural protein P7<br>Viral nonstructural protein NS7 (coronavirus) |
| 21 |              | Viral nonstructural protein NSp7     | Viral protein p7<br>Nonstructural protein p7<br>Viral nonstructural proteins, NSP7<br>NSP7<br>Proteins, NSP7<br>Nonstructural protein NS7<br>Viral proteins, NSP7<br>Nonstructural protein 7<br>Proteins, nonstructural, NSP7   |
| 22 |              | Coronavirus RNA-binding protein NSP9 | Coronavirus nonstructural protein NSP9<br>Coronavirus NSP9<br>SARS-coronavirus NSP9<br>SARS-CoV NSP9<br>Single-stranded RNA-binding protein NSP9<br>Proteins, NSP9<br>NSP9<br>RNA-binding protein NSP9<br>ssRNA-binding protein NSP9<br>Coronavirus non-structural protein NSP9   |

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|----|--------|---------------------------------------|---|
| 23 |        | Interleukin 6                         | Coronavirus non-structural protein 9<br>Coronavirus nonstructural protein 9<br>β2 interferons<br>B-cell stimulatory factor 2<br>Lymphokines, interleukin 6<br>B-cell-stimulating factor 2<br>Lymphokines, B-cell-stimulatory factor 2<br>Lymphokines, B-cell differentiation factor 2<br>BSF2<br>Cytokines, interleukin 6<br>B-cell differentiation factor BSF2<br>IL-6<br>Hepatocyte-stimulating factor lymphokines and Cytokines<br>Lymphokines, hepatocyte-stimulating factor<br>Cytokines, hepatocyte-stimulating factor<br>Hepatocyte-stimulating factor<br>Animal growth regulators, hepatocyte stimulatory factors<br>Hepatocyte growth factor, hepatocyte-stimulating factor<br>B cell differentiation factor-2<br>Plasmacytoma growth factor<br>Hybridoma growth factor<br>MGI-2A<br>Cytokine IL-6 |
| 24 |        | Caveolin 1                            | Vip21 protein<br>VIP21<br>Gene CAV1 protein<br>CAV1   |
| 25 |        | Viral spike glycoproteins, S1 subunit | Viral S1 spike proteins<br>Viral S1 spike glycoproteins<br>Proteins, S1 spike<br>Glycoproteins, S1 spike<br>S1 spike proteins<br>S1 protein<br>Glycoproteins, spike S1<br>S1 glycoprotein<br>Viral proteins, spike S1<br>Viral spike glycoprotein S1<br>Viral spike protein S1<br>Spike protein S1<br>Viral spike S1 protein<br>S protein S1<br>S proteins, S1  |

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|----|--------|--|--|
|    |        |  | Spike proteins, S1<br>Spike glycoprotein S1<br>Spike glycoproteins, S1<br>Viral proteins, spike glycoprotein S1<br>Proteins, spike S1<br>Proteins, S, S1<br>SARS S1 protein<br>SARS S1 glycoprotein<br>Viral spike glycoproteins, subunit S1   |
| 26 |        | Minor nucleoprotein VP30               | Transcription factors, minor nucleoprotein VP30<br>Viral minor nucleoprotein VP30<br>Transcription activation factor VP30  |
| 27 |        | C-type lectin CLEC4M                   | Proteins, CLEC4M<br>CLEC4M<br>CD299 antigens<br>Liver/lymph node-specific ICAM-3-grabbing non-integrin<br>Dendritic cell-specific ICAM-3-grabbing non-integrin 2<br>DC-SIGN-related protein<br>CD209 antigen-like protein 1<br>C-type lectin domain family 4 member M<br>CD299 ntigens<br>DC-SIGNR<br>DC-SIGN2<br>CD299L<br>CD299<br>CD209L1<br>Proteins, L-SIGN<br>L-SIGN |
| 28 |        | CD209 antigen-like proteins, Cd209a    | Cd209a<br>Proteins, DC-SIGN<br>Dendritic cell-specific ICAM-3-grabbing non-integrin<br>CD209 antigen-like protein A<br>DC-SIGN   |
| 29 |        | Epididymal secretory protein E1        | Protein HE1<br>Protein NPC2 (Niemann-Pick C2)<br>Niemann-Pick C2 protein<br>Niemann-Pick disease type C2 protein<br>Gene NPC2 protein<br>NPC2  |
| 30 |        | Coronavirus nonstructural protein NSP3 | NSP3<br>NS3 proteins<br>NSP3 proteins  |

| ID | CAS RN | Preferred Name                         | Synonyms   |
|----|--------|--|--|
|    |        |  | Nonstructural protein 3<br>Proteins, NSP3<br>Viral nonstructural protein NS3<br>Viral nonstructural protein NSP3<br>Nonstructural protein NSP3<br>Coronavirus non-structural protein NSP3<br>Coronavirus non-structural protein 3<br>Coronavirus nonstructural protein 3<br>Severe acute respiratory syndrome coronavirus NSP3<br>SARS-CoV NSP3<br>SARS-CoV-2 NSP3<br>Severe acute respiratory syndrome coronavirus-2 NSP3<br>Nonstructural proteins, coronavirus NSP3<br>Viral nonstructural proteins, NSP3<br>Coronavirus nonstructural proteins, NSP3<br>Coronavirus NSP3<br>Viral nonstructural protein NSP3 (coronavirus)<br>Viral nonstructural protein NS3 (coronavirus)  |
| 31 |        | Coronavirus nonstructural protein NSP4 | NS4<br>NS4 proteins<br>NSP4 proteins<br>Nonstructural protein 4<br>Proteins, NS4<br>Viral nonstructural protein NS4<br>Viral nonstructural protein NSP4<br>Nonstructural protein NSP4<br>Coronavirus non-structural protein NSP4<br>Coronavirus non-structural protein 4<br>Coronavirus nonstructural protein 4<br>Severe acute respiratory syndrome coronavirus-2 NSP4<br>SARS-CoV-2 NSP4<br>SARS-CoV NSP4<br>Severe acute respiratory syndrome coronavirus NSP4<br>Coronavirus NSP4<br>Proteins, NSP4<br>Viral nonstructural protein 4, coronavirus<br>Nonstructural proteins, 4, coronavirus<br>Proteins, viral NS4<br>Nonstructural proteins, 4<br>Viral nonstructural proteins, NS4, coronavirus<br>Proteins, NS4 (nonstructural, 4)<br>Proteins, viral, NS4, coronavirus |

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|----|--------|--|--|
|    |        |  | Viral proteins, coronavirus NSP4<br>Viral nonstructural proteins, coronavirus NSP4<br>Coronavirus nonstructural proteins, NSP4<br>Proteins, NSP4 (nonstructural protein 4) of coronavirus<br>Viral nonstructural protein NS4 (coronavirus)   |
| 32 |        | Coronavirus nonstructural protein NSP6 | NS6<br>NS6 proteins<br>NSP6 proteins<br>Nonstructural protein 6<br>Proteins, NS6<br>Viral nonstructural protein NS6<br>Viral nonstructural protein NSP6<br>Nonstructural protein NSP6<br>Coronavirus non-structural protein NSP6<br>Coronavirus non-structural protein 6<br>Coronavirus nonstructural protein 6<br>Severe acute respiratory syndrome coronavirus-2 NSP6<br>Severe acute respiratory syndrome coronavirus NSP6<br>SARS-CoV NSP6<br>SARS-CoV-2 NSP6<br>Viral nonstructural protein NS6 (coronavirus)<br>Coronavirus NSP6   |
| 33 |        | Coronavirus nonstructural protein NSP1 | NS1<br>NS1 proteins<br>NSP1 proteins<br>Nonstructural protein 1<br>Proteins, NS1<br>Viral nonstructural protein NS1<br>Viral nonstructural protein NSP1<br>Nonstructural protein NSP1<br>Coronavirus non-structural protein NSP1<br>Coronavirus non-structural protein 1<br>Coronavirus nonstructural protein 1<br>Nonstructural proteins, coronavirus NSP1<br>Coronavirus NSP1<br>Coronavirus nonstructural proteins, NSP1<br>Viral nonstructural proteins, coronavirus NSP1<br>Nonstructural protein NS1<br>Coronaviral nonstructural protein NSP1<br>Coronaviral nonstructural protein 1<br>Viral nonstructural protein NSP1 (coronavirus)<br>Viral nonstructural protein NS1 (coronavirus) |

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|----|--------|---------------------------------|---|
| 34 |        | Viral nonstructural protein NS1 | NS1<br>NsP1 proteins<br>Nonstructural protein 1<br>NS1 proteins<br>Proteins, NS1 (nonstructural protein 1)<br>Protein NS1<br>NS1 protein<br>Nonstructural glycoprotein 1<br>NS1 glycoproteins<br>Glycoproteins, nonstructural, 1<br>NSP1<br>Nonstructural protein NS1<br>NS-1 proteins  |
| 35 |        | Dynamin 2                       | Dynamin II<br>Gene DYNII protein<br>Dynamin 2 protein<br>Dynamin type II<br>DNM2  |
| 36 |        | DEAD box RNA helicase DBP5      | Proteins, DBP5<br>DBP5<br>DEAD-box protein 5 (Dbp5)<br>DEAD-box protein 5<br>Ribonucleic acid-trafficking protein 8 (Rat8)<br>DDX19<br>Ribonucleic acid-trafficking protein 8<br>Helicase CA5/6<br>Rat8<br>Proteins, Rat8<br>ATP-dependent RNA helicase DDX19B<br>DDX19B<br>DEAD box RNA helicase DEAD5<br>DEAD box protein 19B<br>RNA helicase DBP5<br>Proteins, DDX19 |
| 37 |        | DEAD box RNA helicase DDX5      | DDX5<br>ATP-dependent RNA helicase DDX5<br>DEAD box protein DDX5<br>RNA helicase p68<br>Helicase p68<br>DEAD box protein 5  |

| ID | CAS RN | Preferred Name                  | Synonyms   |
|----|--------|---------------------------------|--|
| 38 |        | Nucleocapsid proteins           | Nucleocapsid N proteins<br>Nucleocapsid protein<br>N proteins<br>Nucleocapsid protein N<br>N protein (nucleocapsid)<br>N protein   |
| 39 |        | Viral spike glycoproteins       | Spike glycoproteins<br>Spike glycoprotein<br>Spike proteins<br>E2 peplomer glycoproteins<br>Peplomer E2 proteins<br>Peplomer proteins<br>S glycoproteins<br>Viral spike proteins<br>Viral spike glycoprotein<br>S protein<br>SARS S protein<br>SARS S glycoprotein<br>S proteins<br>Viral proteins, spike<br>Viral protein spike<br>Viral proteins, spike glycoprotein<br>Spike protein<br>Proteins, spike, viral<br>Viral spike S protein |
| 40 |        | Clathrin adaptor proteins       | Clathrin-coated vesicle assembly proteins<br>Clathrin coat-assembly proteins<br>AP proteins<br>Clathrin-associated adaptor proteins<br>Adaptor protein complexes, clathrin<br>Adaptor protein complex, clathrin<br>AP clathrin adaptor proteins<br>Clathrin adaptor protein  |
| 41 |        | Viral nonstructural protein NS4 | NSP4 proteins<br>NSP4<br>Nonstructural protein 4<br>NS28 glycoproteins<br>NS4 glycoproteins<br>Nonstructural glycoprotein 4<br>NS4 proteins<br>NS4   |

| ID | CAS RN     | Preferred Name                  | Synonyms   |
|----|------------|---------------------------------|--|
| 42 |            | Viral nonstructural protein NS2 | NSP2 proteins<br>Nonstructural protein 2<br>NS2 proteins<br>NS2 protein<br>NS2<br>Viral nuclear export protein<br>Nuclear export proteins, NS2<br>Nuclear export protein NS2<br>Protein NEP<br>Gene NS2 proteins<br>NEP protein<br>Nonstructural protein NSP2  |
| 43 |            | Viral matrix M proteins         | M (matrix) proteins<br>M proteins<br>Protein M (viral matrix)<br>Viral matrix proteins, matrix (M) proteins<br>Matrix M proteins<br>Matrix (M) proteins<br>Protein M<br>Proteins, M<br>Viral protein M<br>Viral proteins, M<br>M viral protein<br>M viral proteins<br>Viral M protein  |
| 44 | 54249-88-6 | Dipeptidyl peptidase IV         | Dipeptidyl peptidase IV<br>Peptidase, dipeptidyl, IV<br>Glycylproline aminopeptidase<br>Aminopeptidase, dipeptidyl, IV<br>Aminopeptidase, glycylproline<br>X-Prolyl dipeptidyl aminopeptidase<br>Dipeptidyl-aminopeptidase IV<br>E.C. 3.4.14.5<br>EC 3.4.14.5<br>Glycylprolyl dipeptidylaminopeptidase<br>Amino acyl-prolyl dipeptidyl aminopeptidase<br>Glycylproline-dipeptidyl-aminopeptidase<br>Glycylprolyl aminopeptidase<br>X-Prolyl-dipeptidyl aminopeptidase<br>Aminopeptidase, post-proline dipeptidyl<br>Post-proline dipeptidyl aminopeptidase<br>Dipeptidase-IV |

| ID | CAS RN     | Preferred Name         | Synonyms   |
|----|------------|------------------------|--|
|    |            |                        | X-Prolyl dipeptidyl peptidase<br>Dipeptidyl-peptidase IV-β<br>Prolyl dipeptidyl peptidase IV<br>E.C. 3.4.14.11<br>EC 3.4.14.11<br>Casomorphinase<br>DPP IV<br>Post-proline dipeptidyl aminopeptidase IV<br>Xaa-Pro-dipeptidylaminopeptidase<br>Gly-Pro naphthylamidase<br>Antigens, CD26<br>1F7 antigens<br>Adenosine deaminase-binding proteins<br>X-Pro dipeptidyl peptidase<br>Dipeptidyl peptidase-4<br>Dipeptidyl peptidase DP4<br>DPP 4<br>DPP4<br>DPPIV<br>DDP-4<br>T-cell activation antigen CD26<br>TP103<br>ADCP2<br>Proteins, ADCP2<br>Proteins, DPP4<br>Proteins, TP103<br>Antigen 1f7<br>Adenosine deaminase-binding protein<br>1F7 antigen<br>Type IV dipeptidyl aminopeptidase<br>Glycylproline-dipeptidyl-aminopeptidases<br>Glycylproline aminopeptidases<br>Dipeptidyl aminopeptidase type iv<br>X-Prolyl dipeptidyl aminopeptidases<br>Type IV dipeptidyl aminopeptidases<br>X-Prolyl dipeptidyl peptidases<br>Xaa-Pro dipeptidyl-peptidase |
| 45 | 60202-07-5 | Steroid 25-hydroxylase | Steroid 25-hydroxylase<br>Oxygenase, steroid 25-mono-<br>Cholesterol 25-hydroxylase<br>5β-Cholestane-3α,7α,12α-triol 25-hydroxylase<br>E.C. 1.14.99.38<br>Steroid 25-monooxygenase   |

| ID | CAS RN      | Preferred Name          | Synonyms   |
|----|-------------|-------------------------|--|
| 46 |             | Cathepsin L             | Cathepsin L<br>E.C. 3.4.22.15<br>Aldrichina grahamsi cysteine proteinase<br>Cathepsin L1<br>Pacific whiting surimi wash water proteinase   |
| 47 |             | Interleukin 1 receptors | Cytokines, interleukin 1, receptors<br>IL-1 receptor<br>Lymphokines and Cytokines, interleukin 1, receptors<br>IL-1R<br>Interleukin 1 receptor   |
| 48 |             | Interleukin 6 receptors | Cytokines, interleukin 6, receptors<br>Interleukin 6 receptor<br>Interleukin 6 p80 receptors<br>Interleukin-6 receptor p80<br>Lymphokines and Cytokines, interleukin 6, receptors<br>IL-6 receptor<br>CD126 antigens<br>CD126 antigen  |
| 49 |             | Interleukin 8 receptors | Interleukin 8 receptor<br>NAP-1 receptors<br>Lymphokines and Cytokines, interleukin 8, receptors<br>IL-8 receptor<br>CDw128 (antigen)<br>CDw128  |
| 50 | 152478-56-3 | Protein kinase JAK1     | Protein kinase JAK1<br>Kinase (phosphorylating), JAK1 protein<br>Protein tyrosine kinase JAK1<br>Gene JAK1 tyrosine kinase<br>Jak1 tyrosine kinase<br>Tyrosine kinase JAK1<br>Jak1 protein kinase<br>JAK1 kinase<br>Protein kinase JAK-1<br>JAK1 protein tyrosine kinase<br>Tyrosine protein kinase JAK1<br>Janus kinase 1<br>JAK1<br>Kinases JAK1<br>Kinase JAK1<br>Janus kinase JAK1<br>Protein kinases JAK1<br>Protein JAK1 |

| ID | CAS RN | Preferred Name            | Synonyms  |
|----|--------|---------------------------|---|
| 51 |        | Angiotensin AT1 receptors | Angiotensin II AT1 receptors<br>Angiotensin II type 1 receptors<br>AT1 angiotensin II receptors<br>Angiotensin II type I receptors<br>AT1 receptors<br>Type 1 angiotensin receptors<br>AT1 angiotensin receptors<br>Type I angiotensin receptors<br>AT1-receptor<br>Angiotensin receptor AT1<br>Angiotensin type 1 receptor<br>Angiotensin II receptor type 1<br>Angiotensin II receptor 1<br>Angiotensin AT1 receptor<br>AGTR1<br>Type 1 angiotensin II receptor |
| 52 |        | Angiotensin AT2 receptors | Angiotensin receptor AT2<br>AT2 receptors<br>AT2 receptor<br>Angiotensin II type 2 receptors<br>Angiotensin receptor type 2<br>AT2 angiotensin II receptors<br>Angiotensin AT2 receptor   |
| 53 |        | Immunoglobulin receptors  | Ig receptors<br>Igs, receptors<br>Immunoglobulins, receptors<br>Fc receptors<br>Ig Fc receptors<br>Immunoglobulin Fc receptors<br>Receptors, Ig fragment Fc<br>Ig Fc region receptors<br>Ig fragment Fc receptors<br>FcR receptors<br>Immunoglobulins, FcR receptors<br>Fc receptors, FcR<br>Receptor Fc<br>Fc receptor<br>Immunoglobulin receptor  |
| 54 |        | Karyopherin $\alpha$      | $\alpha$ -Karyopherins<br>$\alpha$ -Importins<br>Importin $\alpha$<br>Karyopherin alpha<br>Alpha-karyopherin  |

| ID | CAS RN    | Preferred Name            | Synonyms  |
|----|-----------|---------------------------|---|
| 55 | 9054-63-1 | Karyopherin $\beta$       | $\beta$ -Karyopherins<br>$\beta$ -Importins<br>Importin $\beta$<br>Karyopherin beta<br>Beta-karyopherin   |
| 56 |           | Cathepsin B               | Cathepsin B<br>Cathepsin B1<br>E.C. 3.4.22.1<br>Cathepsin II<br>CTSB  |
| 57 | 9054-63-1 | Microsomal aminopeptidase | Microsomal aminopeptidase<br>Aminopeptidase, microsomal<br>E.C. 3.4.11.2<br>E.C. 3.4.1.2<br>Aminopeptidase M<br>EC 3.4.11.2<br>EC 3.4.1.2<br>Alanyl aminopeptidase<br>Aminopeptidase N<br>Aminopeptidase M (EC 3.4.11.2)<br>L-Alanine aminopeptidase<br>Alanine aminopeptidase (3.4.11.2)<br>Aminopeptidase M II<br>Alanine-specific aminopeptidase<br>Peptidase M<br>Antigens, CD13<br>Aminopeptidase N (EC 3.4.11.2)<br>CD antigens, CD13<br>Vp165 aminopeptidase<br>CD13 antigen<br>CD13<br>Brush border membrane antigen CD13<br>Aminopeptidase N/CD13<br>PepN<br>Membrane alanyl aminopeptidase<br>Aminopeptidase PepN<br>Alanyl aminopeptidases<br>Alanine-specific aminopeptidases<br>Alanine aminopeptidases<br>Aminopeptidase M 2<br>Vp165 aminopeptidases<br>Microsomal aminopeptidases |

| ID | CAS RN | Preferred Name                             | Synonyms   |
|----|--------|--|--|
|    |        |  | L-Alanine aminopeptidases<br>Aminopeptidase M2<br>L-Alanylaminopeptidase<br>CD13 antigens<br>ANPEP<br>Myeloid plasma membrane glycoprotein CD13  |
| 58 |        | Niemann-Pick C1 protein                    | Protein NPC1<br>Gene NPC1 proteins<br>Niemann-Pick C1 proteins<br>Protein NPC1 (Niemann-Pick C1)<br>Gene NPC1 protein<br>Niemann-Pick disease type C1 protein  |
| 59 |        | Interferon-induced transmembrane protein 1 | CD225 antigen<br>Leu-13 antigen<br>Interferon-inducible protein 9-27<br>Interferon-induced protein 17<br>IFITM1 protein<br>Protein IFITM1<br>IFN-induced transmembrane protein 1<br>IFITM1<br>IFITM, IFITM1<br>Interferon-induced proteins, IFITM1               |
| 60 |        | Interferon-induced transmembrane protein 2 | Interferon-inducible protein 1-8D<br>Transmembrane interferon-induced protein 2<br>IFITM2<br>Interferon-induced proteins, IFITM2<br>IFITM, IFITM2<br>Transmembrane proteins, IFITM2<br>Transmembrane proteins, interferon-induced 2                              |
| 61 |        | Interferon-induced transmembrane protein 3 | Interferon-inducible protein 1-8U<br>IFITM3  |
| 62 |        | Endophilins                                | Endophilin   |
| 63 |        | Viral spike glycoproteins, S2 subunit      | S2 (spike-anchoring) glycoprotein<br>SARS S2 glycoprotein<br>S2 spike glycoprotein<br>S2 spike-anchoring protein<br>S2 spike-anchoring glycoprotein<br>SARS S2 proteins<br>S2 spike proteins<br>Proteins, s2 spike<br>S2 (spike-anchoring) protein<br>S2 protein |

| ID | CAS RN | Preferred Name | Synonyms  |
|----|--------|----------------|---|
|    |        |                | S2 protein (spike)<br>S2 glycoprotein<br>Viral proteins, S2 spike<br>Viral glycoprotein S2 spike<br>Glycoproteins, spike S2<br>Proteins, S, S2<br>Protein S, S2<br>Viral spike glycoproteins, subunit S2  |
| 64 |        | Importin IPO8  | Proteins, IMP8<br>IMP8<br>Proteins, RanBP8<br>RanBP8<br>Importins, IPO8<br>Importins, 8<br>Importin-8<br>Importin 8<br>Proteins, IPO8<br>IPO8<br>IPO8 (importin 8)<br>Karopherins, 8<br>Karyopherins, IPO8<br>Karyopherins, importin 8<br>Proteins, karyopherin, IPO8 |