

Gene	Mutations	Consequence	Drug	Method	Study_design	Reference
nsp12-RdRp	Nsp12:Phe480Leu	Destabilizes the interface between the different subdomains of the protein	Remdesivir	Experimental	Selection of RDV r	<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8554178/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8554178/</a>
nsp12-RdRp	Nsp12:Val557Leu	Affects binding to the template RNA and indirectly to remdesivir	Remdesivir	Experimental	Selection of RDV r	<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8554178/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8554178/</a>
nsp12-RdRp	Nsp12:Val473	Significant destabilization effect	Remdesivir	Computational	The effect of mut:	<a href="https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1">https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1</a>
nsp12-RdRp	Nsp12:Arg555	Significant destabilization effect	Remdesivir	Computational	The effect of mut:	<a href="https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1">https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1</a>
nsp12-RdRp	Nsp12:Met566Val	Significant destabilization effect	Remdesivir	Computational	The effect of mut:	<a href="https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1">https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1</a>
nsp12-RdRp	Nsp12:Thr567Ser	Significant destabilization effect	Remdesivir	Computational	The effect of mut:	<a href="https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1">https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1</a>
nsp12-RdRp	Nsp12:Arg569Gly	Significant destabilization effect	Remdesivir	Computational	The effect of mut:	<a href="https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1">https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1</a>
nsp12-RdRp	Nsp12:Met924Leu	Significant destabilization effect	Remdesivir	Computational	The effect of mut:	<a href="https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1">https://www.medrxiv.org/content/10.1101/2020.12.28.20248663v1</a>
nsp12-RdRp	Nsp12:Val166Ala	Increased resistance to RDV	Remdesivir	Experimental	Selection of RDV r	<a href="https://www.science.org/doi/10.1126/scitranslmed.abo0718">https://www.science.org/doi/10.1126/scitranslmed.abo0718</a>
nsp12-RdRp	Nsp12:Asn198Ser	Increased resistance to RDV	Remdesivir	Experimental	Selection of RDV r	<a href="https://www.science.org/doi/10.1126/scitranslmed.abo0718">https://www.science.org/doi/10.1126/scitranslmed.abo0718</a>
nsp12-RdRp	Nsp12:Ser759Ala	7-to-9-fold decreased sensitivity to RDV	Remdesivir	Experimental	Selection of RDV r	<a href="https://www.science.org/doi/10.1126/scitranslmed.abo0718">https://www.science.org/doi/10.1126/scitranslmed.abo0718</a>
nsp12-RdRp	Nsp12:Val792Ile	Increased resistance to RDV	Remdesivir	Experimental	Selection of RDV r	<a href="https://www.science.org/doi/10.1126/scitranslmed.abo0718">https://www.science.org/doi/10.1126/scitranslmed.abo0718</a>
nsp12-RdRp	Nsp12:Cys799Arg	Increased resistance to RDV	Remdesivir	Experimental	Selection of RDV r	<a href="https://www.science.org/doi/10.1126/scitranslmed.abo0718">https://www.science.org/doi/10.1126/scitranslmed.abo0718</a>
nsp12-RdRp	Nsp12:Cys799Phe	Increased resistance to RDV	Remdesivir	Experimental	Selection of RDV r	<a href="https://www.science.org/doi/10.1126/scitranslmed.abo0718">https://www.science.org/doi/10.1126/scitranslmed.abo0718</a>
nsp12-RdRp	Nsp12:Glu802Asp	Confer decreased RDV sensitivity without affecting viral fitness	Remdesivir	Experimental	Plasmids, virus res	<a href="https://www.biorxiv.org/content/10.1101/2021.02.01.429199v1.full">https://www.biorxiv.org/content/10.1101/2021.02.01.429199v1.full</a>