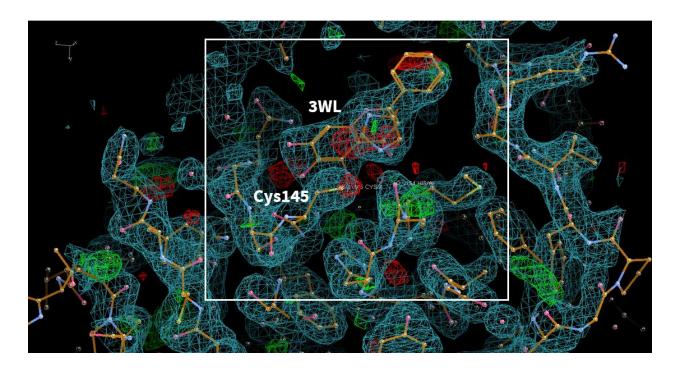


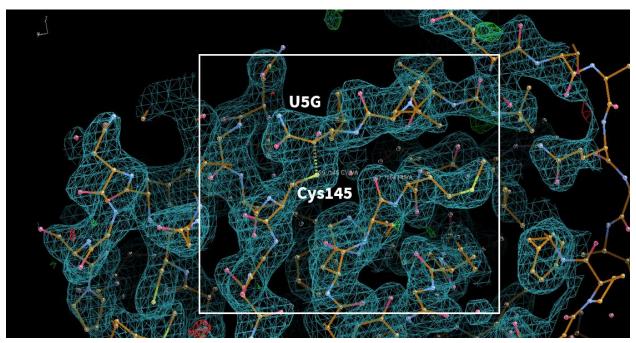
Supplementary Figure 5.2 (non-covalent inhibitor)
PDB ID: 6W63 Ligand: X77 Resolution: 1.46 Å, Author(s): Mesecar et. al.
doi: 10.2210/pdb6W63/pdb Deposited: 2020 March 16 Released: 2020 March 25



**Supplementary Figure 5.3** (non-covalent inhibitor)

PDB ID: 6M2N Ligand: 3WL Resolution: 2.20 Å Author(s): Su et al.

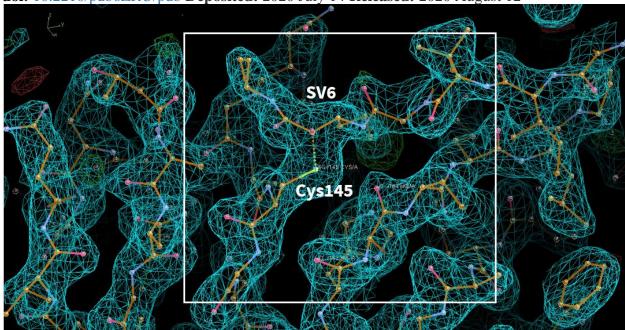
doi: 10.2210/pdb6M2N/pdb Deposited: 2020 February 28 Released: 2020 April 15



Supplementary Figure 5.4 (covalent inhibitor)

**PDB ID:** 6ZRU **Ligand:** Boceprevir(U5G), **Resolution** 2.10 Å **Author(s)**: Oerlemans et al.

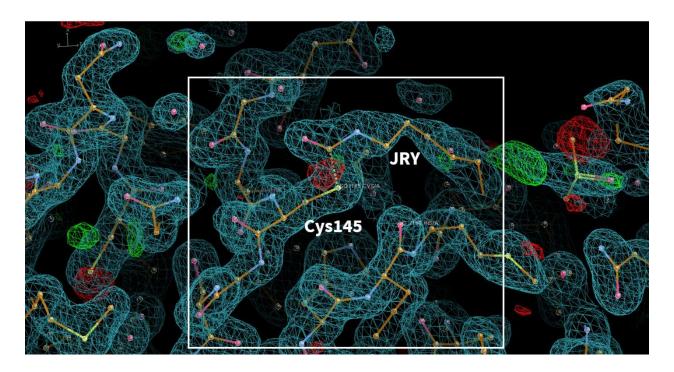
doi: 10.2210/pdb6ZRU/pdb Deposited: 2020 July 14 Released: 2020 August 12



**Supplementary Figure 5.5** (covalent inhibitor)

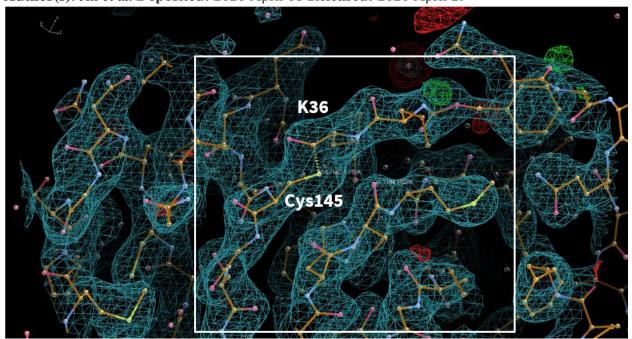
PDB ID: 6ZRT Ligand: Telaprevir(SV6) Resolution: 2.10 Å doi: 10.2210/pdb6ZRT/pdb

Author(s): Oerlemans et al. Deposited: 2020 July 14 Released: 2020 August 12



**Supplementary Figure 5.6** (covalent inhibitor)

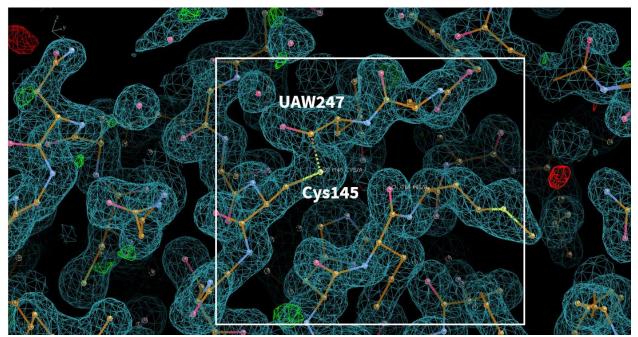
PDB ID: 7BUY Ligand: Carmofur(JRY) Resolution: 1.60 Å doi: 10.2210/pdb7BUY/pdb Author(s): Jin et al. Deposited: 2020 April 08 Released: 2020 April 29



**Supplementary Figure 5.7** (covalent inhibitor)

**PDB ID:** 6WTT **Ligand:** GC-376(K36) **Resolution:** 2.15 Å doi: 10.1101/2020.04.20.051581

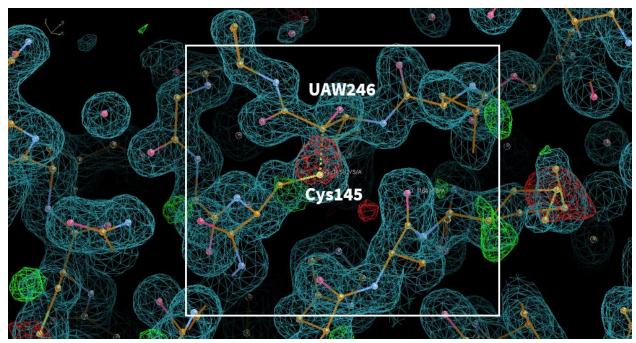
Author(s): Ma et al. Deposited: 2020 May 03 Released: 2020 May 20



**Supplementary Figure 5.8** (covalent inhibitor)

PDB ID: 6XBH Ligand: UAW247 Resolution: 1.60 Å doi: 10.2210/pdb6XBH/pdb

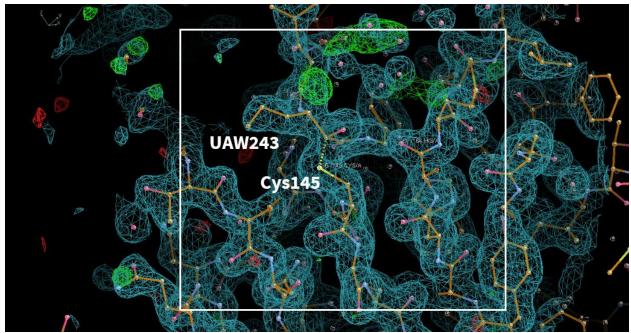
Author(s): Ma et al. Deposited: 2020 June 06 Released: 2020 June 17



Supplementary Figure 5.9 (covalent inhibitor)

PDB ID: 6XBG Ligand: UAW246 Resolution: 1.60 Å doi: 10.2210/pdb6XBH/pdb

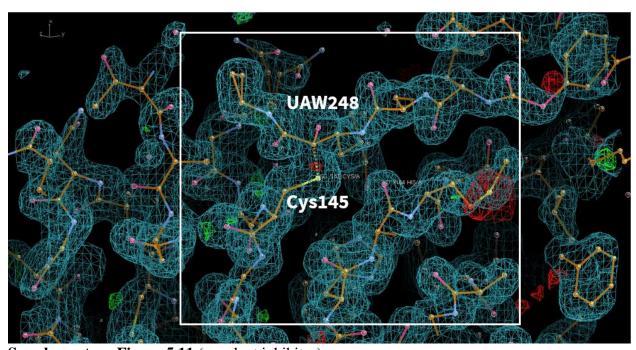
Author(s): Ma et al. Deposited: 2020 June 06 Released: 2020 June 17



**Supplementary Figure 5.10** (covalent inhibitor)

PDB ID: 6XFN Ligand: UAW243 Resolution: 1.70 Å doi: 10.2210/pdb6XFN/pdb

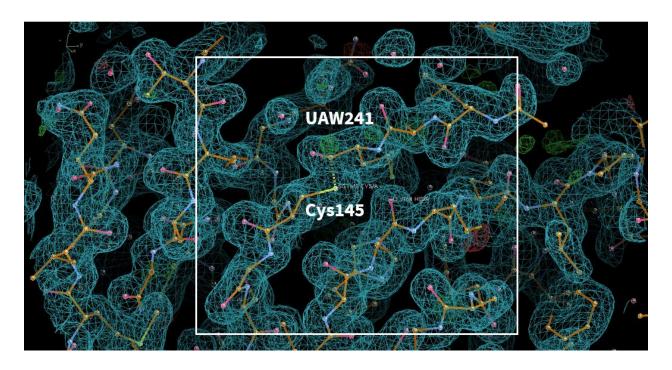
Author(s): Sacco et al. Deposited: 2020 June 15 Released: 2020 June 24



Supplementary Figure 5.11 (covalent inhibitor)

PDB ID: 6XBI Ligand: UAW248 Resolution: 1.70 Å doi: 10.2210/pdb6XBI/pdb

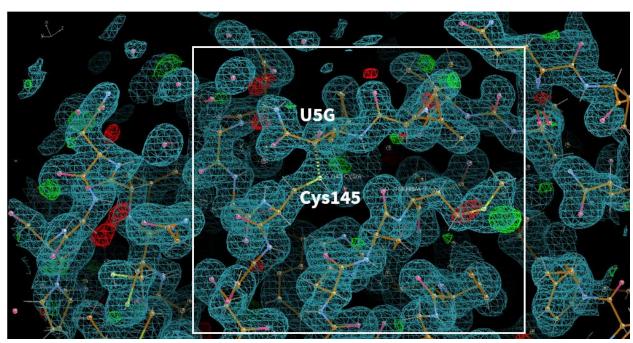
Author(s): Ma et al. Deposited: 2020 June 06 Released: 2020 June 17



Supplementary Figure 5.12 (covalent inhibitor)

PDB ID: 6XA4 Ligand: UAW241 Resolution: 1.65 Å doi: 10.2210/pdb6XA4/pdb

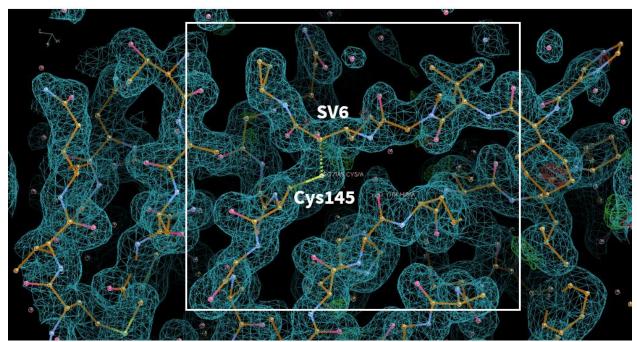
Author(s): Sacco et al. Deposited: 2020 June 03 Released: 2020 June 17



Supplementary Figure 5.13 (covalent inhibitor)

PDB ID: 6WNP Ligand: Boceprevir(U5G) Resolution: 1.44 Å doi: 10.2210/pdb6WNP/pdb

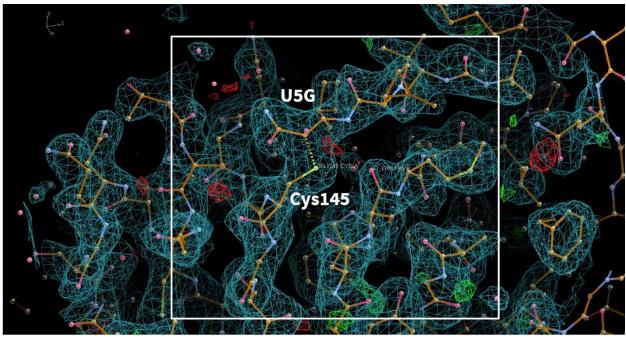
Author(s): Anson et al. Deposited: 2020 April 23 Released: 2020 May 06



Supplementary Figure 5.14 (covalent inhibitor)

PDB ID:7C7P Ligand: Telaprevir(SV6) Resolution: 1.74 Å doi: 10.2210/pdb7C7P/pdb

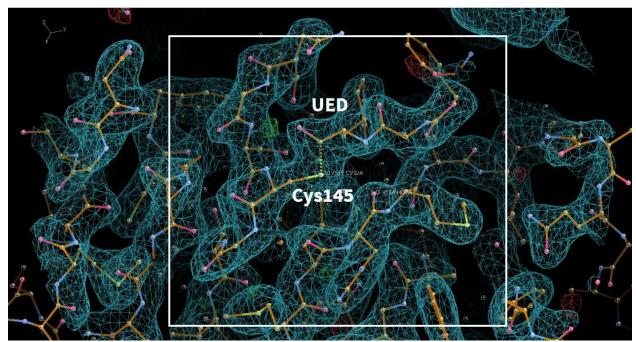
Author(s): Qiao et al. Deposited: 2020 May 26 Released: 2020 July 29



**Supplementary Figure 5.15** (covalent inhibitor)

PDB ID:7COM Ligand: Boceprevir(U5G) Resolution: 2.25 Å doi: 10.2210/pdb7COM/pdb

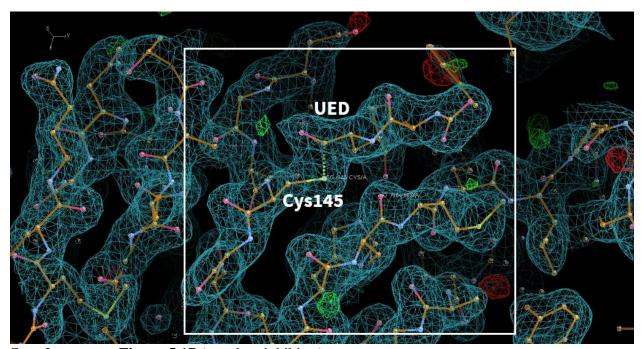
Author(s): Qiao et al. Deposited: 2020 August 04 Released: 2020 August 19



Supplementary Figure 5.16 (covalent inhibitor)

PDB ID: 6WTK Ligand: Feline(UED) Resolution: 2.00 Å doi: 10.2210/pdb6WTK/pdb

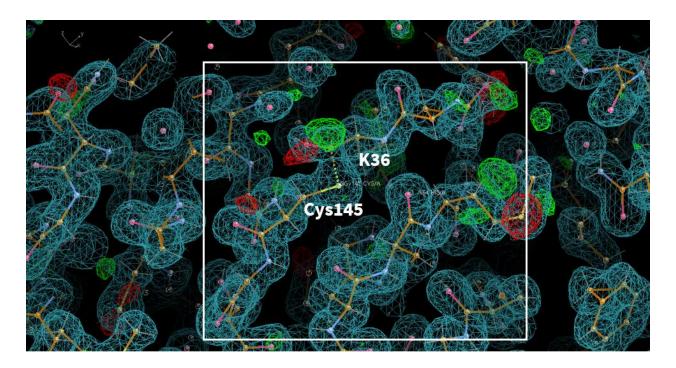
Author(s): Khan et al. Deposited: 2020-May-02 Released: 2020-May-20



Supplementary Figure 5.17 (covalent inhibitor)

PDB ID: 6WTJ Ligand: Feline(UED) Resolution: 1.90 Å doi: 10.2210/pdb6WTJ/pdb

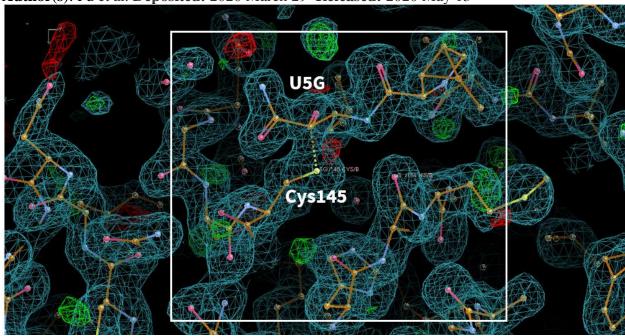
Author(s): Khan et al. Deposited: 2020 May 02 Released: 2020 May 20



Supplementary Figure 5.18 (covalent inhibitor)

PDB ID: 7BRR Ligand: GC-376(K36) Resolution: 1.40 Å doi: 10.2210/pdb7BRR/pdb

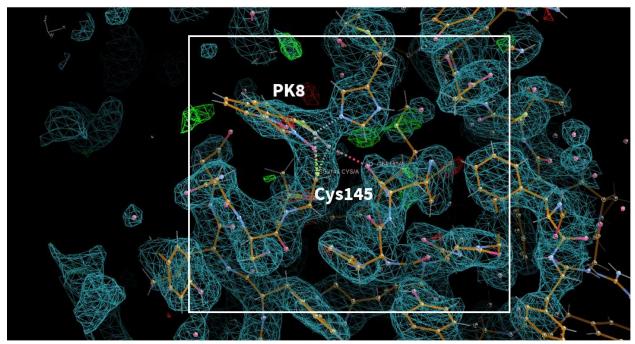
Author(s): Fu et al. Deposited: 2020 March 29 Released: 2020 May 13



Supplementary Figure 5.19 (covalent inhibitor)

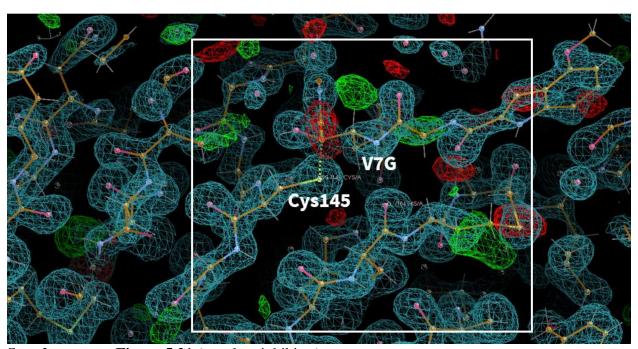
PDB ID: 7BRP Ligand: Boceprevir(U5G) Resolution: 1.95 Å doi: 10.2210/pdb7BPR/pdb

Author(s): Masutani et al. Deposited: 2020 March 23 Released: 2020 July 15



Supplementary Figure 5.20 (covalent inhibitor)

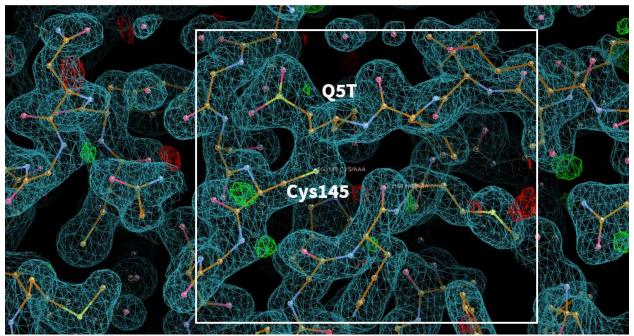
**PDB ID:** 6YT8 **Ligand:** pyrithione zinc(PK8) **Resolution**: 2.50 Å **doi:** 10.2210/pdb6YT8/pdb **Author(s)**: Guenther et al. **Deposited:** 2020 April 24 **Released:** 2020 May 06



Supplementary Figure 5.21 (covalent inhibitor)

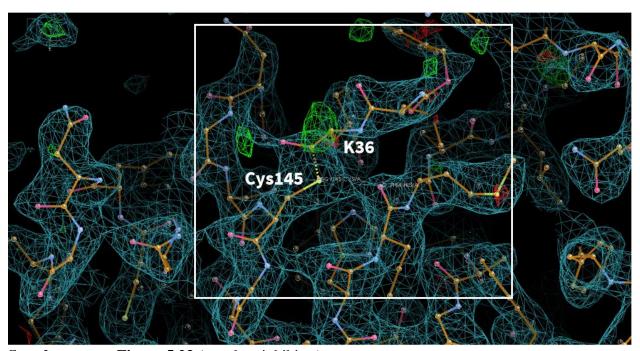
**PDB ID:** 6XR3 **Ligand:** GRL-024-20(V7G) **Resolution**: 1.45 Å **doi:** 10.2210/pdb6XR3/pdb

Author(s): Anson et al. Deposited: 2020 July 10 Released: 2020 August 19



Supplementary Figure 5.22 (covalent inhibitor)

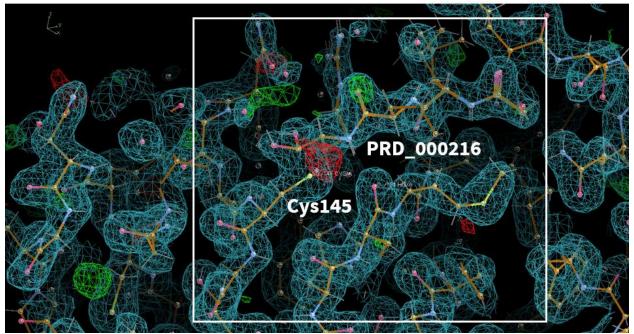
PDB ID: 6Z2E Ligand: biotin-PEG(4)-Abu-Tle-Leu-Gln-vinylsulfone(Q5T) Resolution: 1.70 Å doi: 10.2210/pdb6Z2E/pdb Author(s): Zhang et al. Deposited: 2020 May 15 Released: 2020 June 7



Supplementary Figure 5.23 (covalent inhibitor)

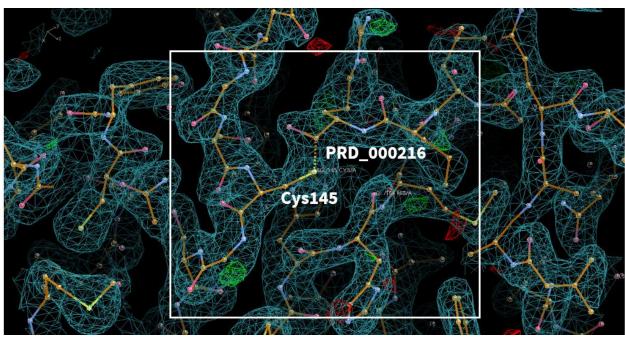
**PDB ID:** 7C8U **Ligand:** GC-376(K36) **Resolution**: 2.35 Å **doi:** 10.2210/pdb7C8U/pdb

Author(s): Zhang et al. Deposited: 2020 June 03 Released: 2020 June 24



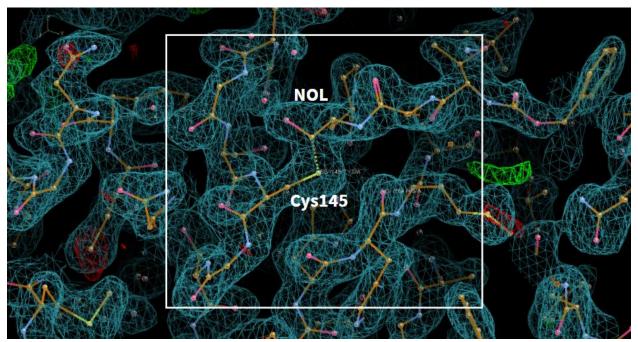
 ${\bf Supplementary\ Figure\ 5.24\ (covalent\ inhibitor)}$ 

PDB ID: 6YZ6 Ligand: Leupeptin(PRD\_000216) Resolution: 1.70 Å doi: 10.2210/pdb6YZ6/pdb Author(s): Guenther et al. Deposited: 2020 May 06 Released: 2020 May 20



Supplementary Figure 5.25 (covalent inhibitor)

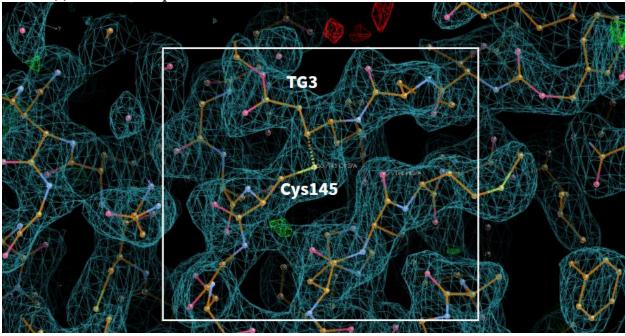
PDB ID: 6XCH Ligand: Leupeptin(PRD\_000216) Resolution: 2.20 Å doi: 10.2210/pdb6XCH/pdb Author(s): Kneller et al. Deposited: 2020 June 08 Released: 2020 June 17



Supplementary Figure 5.26 (covalent inhibitor)

**PDB ID:** 7C8T **Ligand:** TG-0205221(NOL) **Resolution:** 2.05 Å **doi:** 10.2210/pdb7C8T/pdb

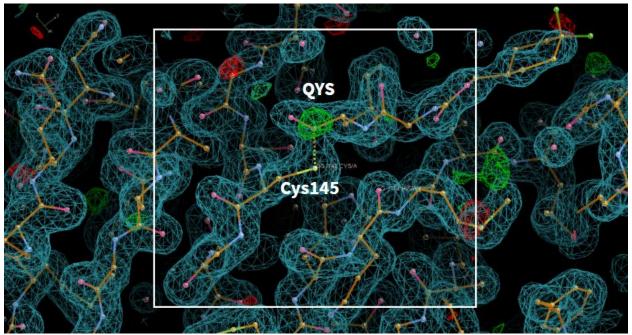
Author(s): Kuo et al. Deposited: 2020 June 03 Released: 2020 June 17



Supplementary Figure 5.27 (covalent inhibitor)

**PDB ID:** 7C8R **Ligand:** TG-0203770(TG3) **Resolution:** 2.30 Å **doi:** 10.2210/pdb7C8R/pdb

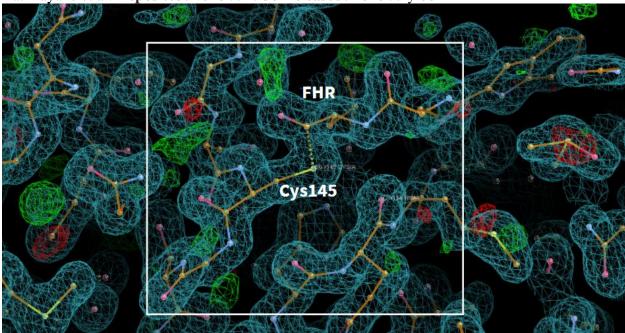
Author(s): Kuo et al. Deposited: 2020 June 03 Released: 2020 June 17



**Supplementary Figure 5.28** (covalent inhibitor)

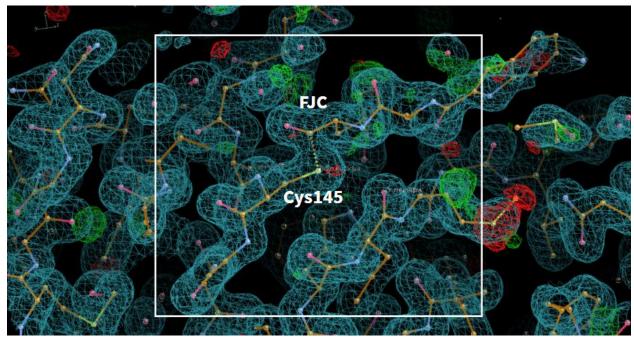
PDB ID: 6XMK Ligand: 7j(QYS) Resolution: 1.70 Å doi: 10.2210/pdb6XMK/pdb Author(s):

Rathnayake et al. Deposited: 2020 June 30 Released: 2020 July 08



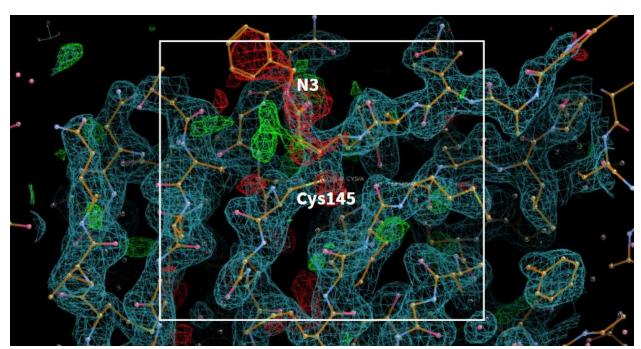
Supplementary Figure 5.29 (covalent inhibitor)

PDB ID: 6LZE Ligand: 11a(FHR) Resolution: 1.50 Å doi: 10.2210/pdb6LZE/pdb Author(s): Dai et al. Deposited: 2020 February 19 Released: 2020 April 29



**Supplementary Figure 5.30** (covalent inhibitor)

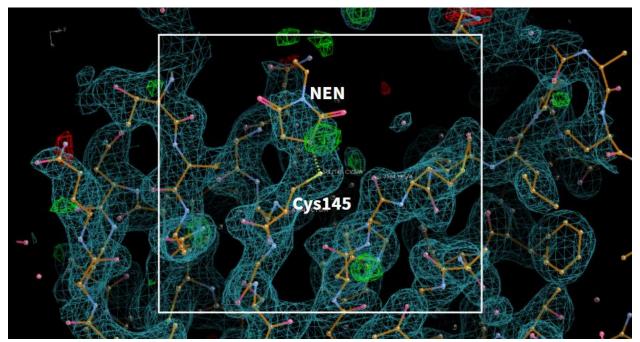
PDB ID: 6M0K Ligand: 11b(FJC) Resolution: 1.50 Å doi: 10.2210/pdb6M0K/pdb Author(s): Dai et al. Deposited: 2020 February 22 Released: 2020 April 29



**Supplementary Figure 5.31** (covalent inhibitor)

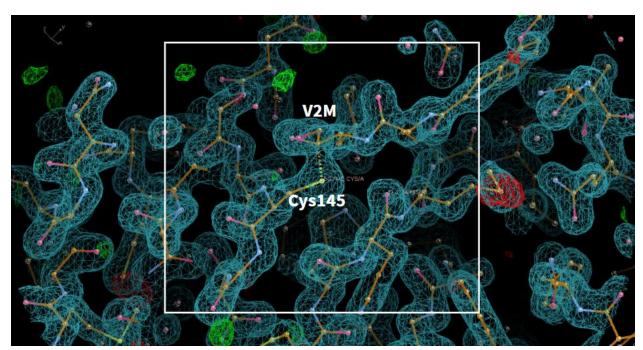
PDB ID: 6LU7 Ligand: N3 Resolution: 2.16 Å doi: 10.2210/pdb6LU7/pdb

Author(s): Jin et al. Deposited: 2020 January 26 Released: 2020 February 05



**Supplementary Figure 5.32** (covalent inhibitor)

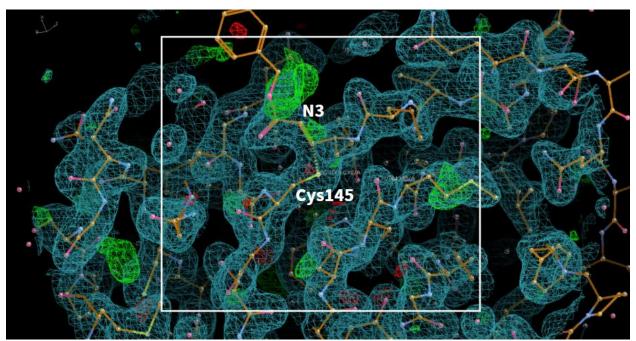
PDB ID: 6XB2 Ligand: 1-ETHYL-PYRROLIDINE-2,5-DIONE(NEN) Resolution: 2.12 A doi: 10.2210/pdb6XB2/pdb Author(s): Kneller et al. Deposited: 2020 June 05 Released: 2020 June 17



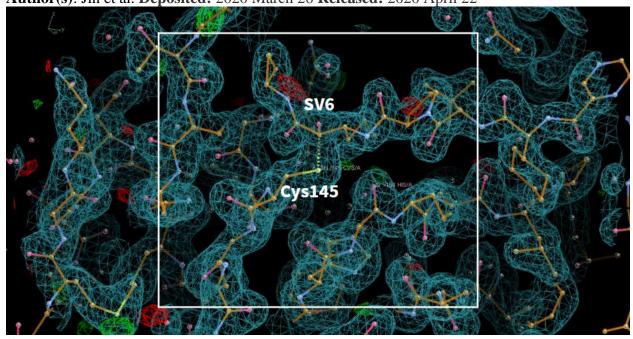
Supplementary Figure 5.33 (covalent inhibitor)

PDB ID: 6XHM Ligand: C24 H32 N4 O6(V2M) Resolution: 1.41 Å doi:

10.2210/pdb6XHM/pdb **Author(s)**: Hoffman et al. **Deposited:** 2020 June 19 **Released:** 2020 July 08



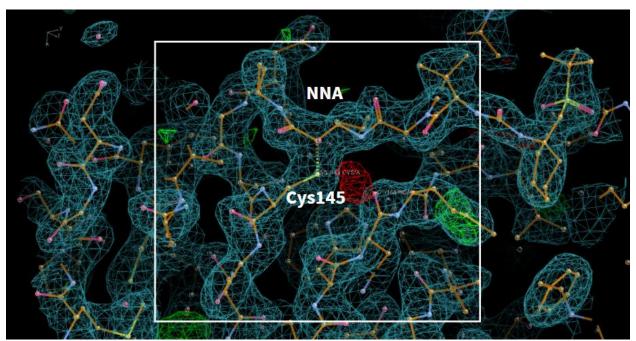
Supplementary Figure 5.34 (covalent inhibitor)
PDB ID: 7BQY Ligand: N3 Resolution: 1.70 Å doi: 10.2210/pdb7BQY/pdb Author(s): Jin et al. Deposited: 2020 March 26 Released: 2020 April 22



**Supplementary Figure 5.35** (covalent inhibitor)

PDB ID: 6XQS Ligand:Telaprevir(SV6) Resolution: 1.90 Å doi: 10.2210/pdb6XQS/pdb

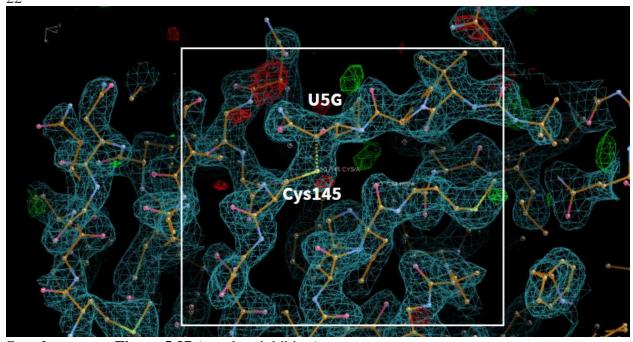
Author(s): Kneller et al. Deposited: 2020 July 10 Released: 2020 July 22



Supplementary Figure 5.36 (covalent inhibitor)

PDB ID: 6XQT Ligand: C36 H63 N5 O7 S(NNA) Resolution: 2.30 Å doi:

10.2210/pdb6XQT/pdb Author(s): Kneller et al. Deposited: 2020 July 10 Released: 2020 July



Supplementary Figure 5.37 (covalent inhibitor)

PDB ID: 6XQU Ligand: Boceprevir(U5G) Resolution: 2.20 Å doi: 10.2210/pdb6XQU/pdb

Author(s): Kneller et al. Deposited: 2020 July 10 Released: 2020 July 22