

Supporting Information

Structure-Based Design, Synthesis and Structure-Activity Relationship Studies of HIV-1 Protease Inhibitors Incorporating Phenyloxazolidinones

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Table of Contents

Characterization data for target compounds	S2
Table of HPLC retention times and purity data	S28

Characterization Data for Additional Target Compounds:

(5S)-N-[(1S,2R)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-phenyloxazolidine-5-carboxamide (15c). ¹H NMR (400 MHz, CDCl₃) δ 7.45–7.38 (m, 4H), 7.36 (dd, *J* = 8.4, 2.0 Hz, 1H), 7.22–7.18 (m, 2H), 7.12 (dd, *J* = 8.0, 1.2 Hz, 2H), 7.02 (t, *J* = 7.6 Hz, 2H), 6.91–6.87 (m, 2H), 6.76 (d, *J* = 9.6 Hz, 1H), 4.78 (dd, *J* = 10.4, 6.0 Hz, 1H), 4.22 (m, 1H), 4.05 (t, *J* = 9.2 Hz, 2H), 3.91 (m, 1H), 3.37 (dd, *J* = 9.2, 6.0 Hz, 1H), 3.21 (dd, *J* = 15.2, 9.2 Hz, 1H), 3.12 (dd, *J* = 14.0, 4.8 Hz, 1H), 3.04–2.97 (m, 2H), 2.83 (dd, *J* = 14.0, 6.8 Hz, 1H), 2.73 (dd, *J* = 13.6, 10.4 Hz, 1H), 1.85 (m, 1H), 0.96 (d, *J* = 6.8 Hz, 3H), 0.91 (d, *J* = 6.4 Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.93, 153.08, 151.84, 148.63, 137.51, 137.42, 131.54, 129.55 (2C), 129.37 (2C), 128.66 (2C), 126.78, 124.88, 123.43, 118.49 (2C), 108.68, 107.77, 102.64, 72.57, 69.85, 59.20, 54.02, 53.56, 48.32, 35.75, 27.60, 20.40, 20.12; HRMS (ESI) *m/z*: calcd for C₃₁H₃₆N₃O₈S [M + H]⁺ 610.2223; found 610.2211.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-phenyloxazolidine-5-carboxamide (15d). ¹H NMR (400 MHz, CDCl₃) δ 9.22 (s, 1H), 8.49 (d, *J* = 1.6 Hz, 1H), 8.27 (d, *J* = 8.4 Hz, 1H), 7.92 (dd, *J* = 8.8, 2.0 Hz, 1H), 7.45–7.38 (m, 4H), 7.22–7.17 (m, 1H), 7.13 (d, *J* = 8.0 Hz, 2H), 7.02 (t, *J* = 7.6 Hz, 2H), 6.90 (t, *J* = 7.2 Hz, 1H), 6.82 (d, *J* = 10.0 Hz, 1H), 4.77 (dd, *J* = 9.6, 6.0 Hz, 1H), 4.24 (m, 1H), 4.05 (t, *J* = 9.6 Hz, 1H), 3.95 (m, 1H), 3.70 (br s, 1H), 3.38 (dd, *J* = 9.6, 6.4 Hz, 1H), 3.27 (dd, *J* = 15.2, 9.2 Hz, 1H), 3.15–3.05 (m, 3H), 2.93 (dd, *J* = 13.6, 6.8 Hz, 1H), 2.75 (dd, *J* = 13.6, 10.4 Hz, 1H), 1.88 (m, 1H), 0.95 (d, *J* = 6.4 Hz, 3H), 0.91 (d, *J* = 6.0 Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.99, 158.33, 155.87, 153.12, 137.48, 137.38, 135.75, 134.66, 129.53 (2C), 129.38 (2C), 128.68 (2C), 126.82, 125.07, 124.91, 124.73, 122.58, 118.52 (2C), 72.54, 69.88, 59.08, 53.94, 53.64, 48.34, 35.74, 27.57, 20.38, 20.12; HRMS (ESI) *m/z*: calcd for C₃₁H₃₅N₄O₆S₂ [M + H]⁺ 623.1998; found 623.1995.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxo-3-phenyloxazolidine-5-carboxamide (15e). ¹H NMR (400 MHz, CDCl₃) δ 7.79 (m, 2H), 7.54 (d, *J* = 8.8 Hz, 2H), 7.45–7.38 (m, 4H), 7.22–7.18 (m, 1H), 7.12 (m, 2H), 7.03 (t, *J* = 7.6 Hz, 2H), 6.90 (m, 1H), 6.72 (d, *J* = 10.0 Hz, 1H), 4.80 (d, *J* = 3.6 Hz, 2H), 4.76 (dd, *J* = 9.6, 5.6 Hz, 1H), 4.21 (m, 1H), 4.04 (t, *J* = 9.6 Hz, 1H), 3.90 (m, 1H), 3.62 (d, *J* = 3.2 Hz, 1H), 3.37 (dd, *J* = 9.6, 6.0 Hz, 1H), 3.23 (dd, *J* = 15.2, 9.6 Hz, 1H), 3.10 (dd, *J* = 13.6, 4.4 Hz, 1H), 3.07–2.97 (m, 2H), 2.86 (dd, *J* = 13.2, 6.8 Hz, 1H), 2.73 (dd, *J* = 14.0, 10.4 Hz, 1H), 2.02 (br s, 1H), 1.86 (m, 1H), 0.96 (d, *J* = 6.8 Hz, 3H), 0.90 (d, *J* = 6.4 Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.93, 153.07, 146.54, 137.48, 137.34, 137.28, 129.53 (2C), 129.38 (2C), 128.67 (2C), 127.86 (2C), 127.47 (2C), 126.80, 124.90, 118.50 (2C), 72.46, 69.83, 64.45, 59.07, 53.91, 53.55, 48.32, 35.72, 25.58, 20.38, 20.10; HRMS (ESI) *m/z*: calcd for C₃₁H₃₈N₃O₇S [M + H]⁺ 596.2430; found 596.2413.

(5S)-N-[(1S,2R)-3-[[4-(Aminophenyl)sulfonyl](2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(2-hydroxyphenyl)-2-oxooxazolidine-5-carboxamide (17a). ¹H NMR (400 MHz, CDCl₃) δ 7.57 (m, 2H), 7.43 (br s, 1H), 7.24–7.13 (m, 5H), 7.07 (m, 2H), 6.97 (dt, *J* = 8.0, 1.6 Hz, 1H), 6.87 (dd, *J* = 8.4, 1.6 Hz, 1H), 6.75 (d, *J* = 10.0 Hz, 1H), 6.69 (m, 2H), 4.91 (dd, *J* = 10.0, 6.4 Hz, 1H), 4.22 (m, 1H), 4.15 (br s, 1H), 4.09 (t, *J* = 10.0 Hz, 1H), 3.93 (m, 1H), 3.75 (d, *J* = 2.8 Hz, 1H), 3.54 (dd, *J* = 9.6, 6.4 Hz, 1H), 3.22 (dd, *J* = 15.2, 9.2 Hz, 1H), 3.08 (dd, *J* = 14.0, 4.8 Hz, 1H), 3.02–2.93 (m, 2H), 2.82–2.76 (m, 2H), 1.83 (m, 1H), 0.95 (d, *J* = 6.0 Hz, 3H), 0.90 (d, *J* = 6.8 Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.10, 155.35, 150.98, 150.01, 137.50, 129.80 (2C), 129.69 (2C), 128.74 (2C), 128.68, 126.91, 126.27, 124.72, 122.68, 121.39, 120.73, 114.40 (2C), 72.42, 71.95, 59.15, 53.93, 53.60, 49.96, 35.50, 27.61, 20.42, 20.14; HRMS (ESI) *m/z*: calcd for C₃₀H₃₇N₄O₇S [M + H]⁺ 597.2383; found 597.2379.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-3-(2-hydroxyphenyl)-2-oxooxazolidine-5-carboxamide (17b). ¹H NMR

(400 MHz, CDCl₃) δ 7.74 (m, 2H), 7.41 (s, 1H), 7.25–7.14 (m, 5H), 7.09–7.05 (m, 2H), 7.02–6.95 (m, 3H), 6.87 (dd, J = 8.0, 1.2 Hz, 1H), 6.75 (d, J = 10.0 Hz, 1H), 4.91 (dd, J = 10.0, 6.4 Hz, 1H), 4.24 (m, 1H), 4.10 (t, J = 9.6 Hz, 1H), 3.94 (m, 1H), 3.88 (s, 3H), 3.70 (d, J = 2.8 Hz, 1H), 3.54 (dd, J = 10.0, 6.8 Hz, 1H), 3.23 (dd, J = 15.2, 9.2 Hz, 1H), 3.09 (dd, J = 14.4, 4.4 Hz, 1H), 3.04–2.95 (m, 2H), 2.84–2.77 (m, 2H), 1.85 (m, 1H), 0.95 (d, J = 6.4 Hz, 3H), 0.90 (d, J = 6.8 Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.49, 163.36, 155.64, 150.65, 137.66, 129.87, 129.76 (2C), 129.68 (2C), 129.01, 128.71 (2C), 126.85, 124.35, 124.04, 121.23, 119.94, 114.66 (2C), 72.47, 71.97, 58.94, 55.89, 53.72, 53.67, 50.05, 35.43, 27.47, 20.37, 20.13; HRMS (ESI) m/z : calcd for C₃₁H₃₈N₃O₈S [M + H]⁺ 612.2380; found 612.2389.

(5S)-N-[(1S,2R)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(2-hydroxyphenyl)-2-oxooxazolidine-5-carboxamide (17c). ¹H NMR (400 MHz, CDCl₃) δ 7.42 (s, 1H), 7.37 (dd, J = 8.0, 1.6 Hz, 1H), 7.25–7.15 (m, 6H), 7.10–7.06 (m, 2H), 6.97 (dt, J = 8.4, 1.6 Hz, 1H), 6.92–6.88 (m, 2H), 6.79 (d, J = 9.2 Hz, 1H), 6.10 (s, 2H), 4.92 (dd, J = 9.6, 6.8 Hz, 1H), 4.24 (m, 1H), 4.11 (t, J = 10.0 Hz, 1H), 3.94 (m, 1H), 3.66 (d, J = 3.2 Hz, 1H), 3.55 (dd, J = 9.2, 6.4 Hz, 1H), 3.20 (dd, J = 15.2, 8.8 Hz, 1H), 3.09 (dd, J = 14.0, 4.8 Hz, 1H), 3.03–2.98 (m, 2H), 2.86–2.77 (m, 2H), 1.85 (m, 1H), 0.95 (d, J = 6.4 Hz, 3H), 0.91 (d, J = 6.4 Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.58, 155.75, 151.83, 150.81, 148.60, 137.68, 131.53, 129.67 (2C), 129.10, 128.71 (2C), 126.86, 124.37, 124.23, 123.44, 121.18, 119.78, 108.66, 107.75, 102.64, 72.52, 71.99, 58.96, 53.71, 53.68, 50.10, 35.36, 27.45, 20.35, 20.14; HRMS (ESI) m/z : calcd for C₃₁H₃₆N₃O₉S [M + H]⁺ 626.2172; found 626.2159.

(5S)-N-[(1S,2R)-3-[[4-(Aminophenyl)sulfonyl](2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-[(2-(trifluoromethyl)phenyl)oxazolidine-5-carboxamide (18a). ¹H NMR (400 MHz, CDCl₃) δ 7.74 (d, J = 7.6 Hz, 1H), 7.65 (t, J = 7.6 Hz, 1H), 7.58–7.52 (m, 3H), 7.31–7.19 (m, 5H), 7.16 (d, J = 8.0 Hz, 1H), 6.79 (d, J = 9.2 Hz, 1H), 6.71–6.67 (m, 2H), 4.89 (dd, J = 9.2,

6.0 Hz, 1H), 4.27 (m, 1H), 4.16 (br s, 1H), 4.05 (t, $J = 8.8$ Hz, 1H), 3.90 (m, 1H), 3.83 (d, $J = 2.4$ Hz, 1H), 3.56 (dd, $J = 8.8, 6.4$ Hz, 1H), 3.18 (dd, $J = 14.8, 8.8$ Hz, 1H), 3.10 (dd, $J = 14.0, 4.8$ Hz, 1H), 2.99–2.89 (m, 3H), 2.78 (dd, $J = 13.6, 6.8$ Hz, 1H), 1.82 (m, 1H), 0.94 (d, $J = 6.8$ Hz, 3H), 0.89 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, CDCl_3) δ 168.53, 155.06, 150.96, 137.58, 134.71, 133.78, 130.60, 129.78 (2C), 129.73, 129.67 (2C), 128.85 (2C), 127.87 (d, $J = 5.1$ Hz), 126.88, 126.37, 123.33 (d, $J = 271.8$ Hz), 114.39 (2C), 72.41, 71.56, 59.14, 53.89, 53.45, 52.14, 35.28, 27.61, 20.41, 20.14; HRMS (ESI) m/z : calcd for $\text{C}_{31}\text{H}_{36}\text{F}_3\text{N}_4\text{O}_6\text{S}$ $[\text{M} + \text{H}]^+$ 649.2308; found 649.2297.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxo-3-[(2-(trifluoromethyl)phenyl)oxazolidine-5-carboxamide (18b). ^1H NMR (400 MHz, CDCl_3) δ 7.75–7.70 (m, 3H), 7.65 (dt, $J = 8.0, 1.6$ Hz, 1H), 7.54 (t, $J = 8.0$ Hz, 1H), 7.32–7.20 (m, 4H), 7.17 (d, $J = 7.6$ Hz, 1H), 7.01–6.97 (m, 2H), 6.82 (d, $J = 9.2$ Hz, 1H), 4.90 (dd, $J = 9.6, 6.4$ Hz, 1H), 4.26 (m, 1H), 4.06 (t, $J = 9.2$ Hz, 1H), 3.91 (m, 1H), 3.87 (s, 3H), 3.79 (d, $J = 2.8$ Hz, 1H), 3.59 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.18 (dd, $J = 14.8, 8.8$ Hz, 1H), 3.11 (dd, $J = 14.0, 4.8$ Hz, 1H), 3.01–2.90 (m, 3H), 2.80 (dd, $J = 13.6, 6.8$ Hz, 1H), 1.83 (m, 1H), 0.93 (d, $J = 6.8$ Hz, 3H), 0.88 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, CDCl_3) δ 168.62, 163.32, 155.03, 137.54, 134.69, 133.80, 130.59, 129.97, 129.95, 129.73 (2C), 129.65 (2C), 128.89 (2C), 127.87 (q, $J = 5.0$ Hz), 126.92, 123.32 (d, $J = 271.1$ Hz), 114.63 (2C), 72.36, 71.54, 59.04, 55.88, 53.83, 53.54, 52.13, 35.22, 27.58, 20.38, 20.12; HRMS (ESI) m/z : calcd for $\text{C}_{32}\text{H}_{37}\text{F}_3\text{N}_3\text{O}_7\text{S}$ $[\text{M} + \text{H}]^+$ 664.2304; found 664.2299.

(5S)-N-[(1S,2R)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-[(2-(trifluoromethyl)phenyl)oxazolidine-5-carboxamide (18c). ^1H NMR (400 MHz, CDCl_3) δ 7.74 (dd, $J = 8.0, 1.2$ Hz, 1H), 7.65 (dt, $J = 8.0, 1.2$ Hz, 1H), 7.53 (t, $J = 8.0$ Hz, 1H), 7.34 (dd, $J = 8.0, 2.0$ Hz, 1H), 7.31–7.17 (m, 7H), 6.92 (d, $J = 9.6$ Hz, 1H), 6.89 (d, $J = 8.0$ Hz, 1H), 6.08 (s, 2H), 4.91 (dd, $J = 9.6, 6.4$ Hz, 1H), 4.27 (m, 1H), 4.05 (t, $J = 9.2$ Hz, 1H), 3.92 (m, 1H), 3.58 (dd, $J = 9.2, 6.4$ Hz, 1H), 3.18–3.08 (m, 2H), 3.02–2.93 (m, 2H), 2.90 (dd, $J = 14.0, 9.6$ Hz,

1H), 2.82 (dd, $J = 13.2, 7.2$ Hz, 1H), 1.84 (m, 1H), 0.92 (d, $J = 6.8$ Hz, 3H), 0.89 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, CDCl_3) δ 168.65, 155.14, 151.78, 148.58, 137.62, 134.72, 133.80, 131.68, 130.61, 129.74, 129.64 (2C), 128.87 (2C), 127.85 (q, $J = 5.1$ Hz), 126.90, 123.38, 123.33 (d, $J = 271.8$), 108.64, 107.76, 102.61, 72.43, 71.61, 59.05, 53.82, 53.57, 45.90, 35.17, 27.55, 20.36, 20.12; HRMS (ESI) m/z : calcd for $\text{C}_{32}\text{H}_{35}\text{F}_3\text{N}_3\text{O}_8\text{S}$ $[\text{M} + \text{H}]^+$ 678.2097; found 678.2091.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-[(2-(trifluoromethyl)phenyl)oxazolidine-5-carboxamide (18d). ^1H NMR (400 MHz, CDCl_3) δ 9.22 (s, 1H), 8.47 (d, $J = 1.6$ Hz, 1H), 8.26 (d, $J = 8.8$ Hz, 1H), 7.89 (dd, $J = 8.4, 1.6$ Hz, 1H), 7.74 (dd, $J = 8.0, 1.2$ Hz, 1H), 7.65 (dt, $J = 7.6, 1.6$ Hz, 1H), 7.54 (t, $J = 7.6$ Hz, 1H), 7.31–7.18 (m, 6H), 6.96 (d, $J = 9.2$ Hz, 1H), 4.90 (dd, $J = 9.6, 6.4$ Hz, 1H), 4.28 (m, 1H), 4.06 (t, $J = 9.2$ Hz, 1H), 3.98 (m, 1H), 3.61 (dd, $J = 8.8, 6.4$ Hz, 1H), 3.21 (dd, $J = 15.2, 8.8$ Hz, 1H), 3.12 (dd, $J = 14.0, 5.2$ Hz, 1H), 3.08–3.0 (m, 2H), 2.96–2.88 (m, 2H), 1.86 (m, 1H), 0.92 (d, $J = 6.4$ Hz, 3H), 0.89 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, CDCl_3) δ 168.74, 158.31, 155.82, 155.13, 137.55, 135.87, 134.66, 134.61, 133.81, 130.58, 129.78, 129.63 (2C), 129.56, 129.25, 128.90 (2C), 127.87 (q, $J = 4.4$ Hz), 126.96, 125.07, 124.67, 122.55, 72.38, 71.59, 58.92, 53.72, 52.16, 35.17, 27.53, 20.35, 20.11; HRMS (ESI) m/z : calcd for $\text{C}_{32}\text{H}_{34}\text{F}_3\text{N}_4\text{O}_6\text{S}_2$ $[\text{M} + \text{H}]^+$ 691.1872; found 691.1849.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxo-3-[(2-(trifluoromethyl)phenyl)oxazolidine-5-carboxamide (18e). ^1H NMR (400 MHz, CDCl_3) δ 7.80–7.73 (m, 3H), 7.64 (dt, $J = 7.6, 1.2$ Hz, 1H), 7.57–7.52 (m, 3H), 7.30–7.19 (m, 5H), 7.15 (d, $J = 8.0$ Hz, 1H), 6.88 (d, $J = 9.2$ Hz, 1H), 4.84 (dd, $J = 9.2, 6.0$ Hz, 1H), 4.78 (d, $J = 5.2$ Hz, 2H), 4.27 (m, 1H), 4.04 (t, $J = 9.2$ Hz, 1H), 3.91 (m, 1H), 3.77 (d, $J = 2.4$ Hz, 1H), 3.54 (dd, $J = 9.6, 6.8$ Hz, 1H), 3.20 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.08 (dd, $J = 14.4, 5.2$ Hz, 1H), 3.04–2.98 (m, 2H), 2.91 (dd, $J = 14.4, 10.1$ Hz, 1H), 2.85 (dd, $J = 14.0, 6.4$ Hz, 1H), 2.19 (br s, 1H), 1.84 (m, 1H), 0.94 (d, $J = 6.8$ Hz, 3H), 0.89 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, CDCl_3) δ 168.71, 155.12,

146.61, 137.48, 137.37, 134.64, 133.79, 130.59, 129.78, 129.62 (2C), 128.88 (2C), 127.87 (m), 127.81 (2C), 127.47 (2C), 126.93, 123.32 (d, $J = 271.1$ Hz), 72.35, 71.56, 64.43, 58.97, 53.67, 53.58, 52.16, 35.19, 27.54, 20.35, 20.08; HRMS (ESI) m/z : calcd for $C_{32}H_{37}F_3N_3O_7S$ $[M + H]^+$ 664.2304; found 664.2271.

(5S)-N-[(1S,2R)-3-[[4-(Aminophenyl)sulfonyl](2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(2,4-difluorophenyl)-2-oxooxazolidine-5-carboxamide (19a). 1H NMR (400 MHz, $CDCl_3$) δ 7.58–7.54 (m, 2H), 7.34–7.28 (m, 1H), 7.18 (d, $J = 4.0$ Hz, 4H), 7.14–7.08 (m, 1H), 6.96–6.87 (m, 3H), 6.70–6.67 (m, 2H), 4.85 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.28–4.21 (m, 1H), 4.02 (t, $J = 9.2$ Hz, 1H), 3.92 (m, 1H), 3.79 (br s, 1H), 3.49 (dd, $J = 9.6, 6.4$ Hz, 1H), 3.18 (dd, $J = 14.4, 8.8$ Hz, 1H), 3.08 (dd, $J = 14.0, 4.4$ Hz, 1H), 3.0–2.92 (m, 2H), 2.83–2.77 (m, 2H), 1.86–1.79 (m, 1H), 0.92 (d, $J = 6.8$ Hz, 3H), 0.89 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.44, 161.79 (dd, $J = 249.8, 11.7$ Hz), 157.36 (dd, $J = 252.0, 12.4$ Hz), 154.53, 151.06, 137.67, 129.78 (2C), 129.62 (2C), 128.67 (2C), 128.52 (dd, $J = 9.6, 2.2$ Hz), 126.77, 126.19, 120.82 (dd, $J = 11.0, 3.6$ Hz), 114.40 (2C), 112.15 (dd, $J = 22.7, 3.7$ Hz), 105.44 (dd, $J = 25.6, 23.4$ Hz), 72.50, 71.24, 59.07, 53.88, 53.47, 49.93 (d, $J = 4.4$ Hz), 35.44, 27.55, 20.41, 20.17; HRMS (ESI) m/z : calcd for $C_{30}H_{35}F_2N_4O_6S$ $[M + H]^+$ 617.2245; found 617.2233.

(5S)-3-(2,4-Difluorophenyl)-N-[(1S,2R)-2-hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (19b). 1H NMR (400 MHz, $CDCl_3$) δ 7.75–7.72 (m, 2H), 7.35–7.29 (m, 1H), 7.21–7.20 (m, 4H), 7.15–7.11 (m, 1H), 7.02–6.98 (m, 2H), 6.96–6.89 (m, 2H), 6.73 (d, $J = 9.6$ Hz, 1H), 4.85 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.26–4.20 (m, 1H), 4.06 (t, $J = 9.2$ Hz, 1H), 3.92 (m, 1H), 3.88 (s, 3H), 3.70 (d, $J = 2.8$ Hz, 1H), 3.54 (dd, $J = 9.6, 6.4$ Hz, 1H), 3.22 (dd, $J = 14.8, 8.8$ Hz, 1H), 3.10 (dd, $J = 14.0, 4.8$ Hz, 1H), 3.04–2.94 (m, 2H), 2.86–2.78 (m, 2H), 1.84 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.48, 163.34, 161.79 (dd, $J = 249.1, 11.0$ Hz), 157.34 (dd, $J = 252.0, 12.5$ Hz),

154.43, 137.58, 129.92, 129.75 (2C), 129.60 (2C), 128.71 (2C), 128.50 (dd, $J = 10.2, 2.9$ Hz), 126.82, 120.80 (dd, $J = 11.7, 4.4$ Hz), 114.64 (2C), 112.15 (dd, $J = 22.0, 3.7$ Hz), 105.44 (dd, $J = 26.4, 23.5$ Hz), 72.49, 71.20, 59.04, 55.89, 53.88, 53.51, 49.91 (d, $J = 5.2$ Hz), 35.42, 27.55, 20.39, 20.13; HRMS (ESI) m/z : calcd for $C_{31}H_{36}F_2N_3O_7S$ $[M + H]^+$ 632.2242; found 632.2239.

(5S)-N-[(1S,2R)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(2,4-difluorophenyl)-2-oxooxazolidine-5-carboxamide (19c). 1H NMR (400 MHz, $CDCl_3$) δ 7.36 (dd, $J = 8.4, 2.0$ Hz, 1H), 7.33–7.29 (m, 1H), 7.22–7.19 (m, 5H), 7.15–7.11 (m, 1H), 6.96–6.89 (m, 3H), 6.77 (d, $J = 9.6$ Hz, 1H), 6.09 (s, 2H), 4.86 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.26–4.20 (m, 1H), 4.07 (t, $J = 9.2$ Hz, 1H), 3.91 (m, 1H), 3.67 (br s, 1H), 3.55 (dd, $J = 8.8, 6.0$ Hz, 1H), 3.20 (dd, $J = 15.2, 9.6$ Hz, 1H), 3.11 (dd, $J = 14.0, 4.8$ Hz, 1H), 3.03–2.96 (m, 2H), 2.86–2.79 (m, 2H), 1.87–1.82 (m, 1H), 0.95 (d, $J = 6.0$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.51, 161.80 (dd, $J = 249.0, 10.9$ Hz), 157.34 (dd, $J = 252.0, 11.7$ Hz), 154.40, 151.84, 148.62, 137.50, 131.56, 129.59 (2C), 128.75 (2C), 128.50 (dd, $J = 10.3, 3.0$ Hz), 126.88, 123.42, 120.78 (dd, $J = 11.0, 4.4$ Hz), 112.15 (dd, $J = 22.7, 3.7$ Hz), 108.67, 107.76, 105.45 (dd, $J = 26.4, 23.5$ Hz), 102.64, 72.53, 71.17, 59.16, 53.97, 53.53, 49.91 (d, $J = 4.4$ Hz), 35.43, 27.58, 20.39, 20.12; HRMS (ESI) m/z : calcd for $C_{31}H_{34}F_2N_3O_8S$ $[M + H]^+$ 646.2035; found 646.2023.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(2,4-difluorophenyl)-2-oxooxazolidine-5-carboxamide (19d). 1H NMR (400 MHz, $CDCl_3$) δ 9.21 (s, 1H), 8.49 (d, $J = 1.6$ Hz, 1H), 8.25 (d, $J = 8.4$ Hz, 1H), 7.91 (dd, $J = 8.8, 1.6$ Hz, 1H), 7.34–7.28 (m, 1H), 7.20–7.15 (m, 4H), 7.14–7.09 (m, 1H), 6.98 (d, $J = 9.2$ Hz, 1H), 6.95–6.88 (m, 2H), 4.85 (dd, $J = 9.2, 6.0$ Hz, 1H), 4.27 (m, 1H), 4.06 (t, $J = 9.2$ Hz, 1H), 3.99 (m, 1H), 3.77 (br s, 1H), 3.52 (dd, $J = 8.8, 6.4$ Hz, 1H), 3.23 (dd, $J = 14.8, 9.2$ Hz, 1H), 3.14–3.08 (m, 2H), 3.03 (dd, $J = 13.6, 8.4$ Hz, 1H), 2.93 (dd, $J = 13.2, 6.8$ Hz, 1H), 2.82 (dd, $J = 13.6, 10.4$ Hz, 1H), 1.88 (m, 1H), 0.91 (d, $J = 6.4$ Hz, 3H), 0.89 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.58, 161.81 (dd, J

= 249.1, 11.0 Hz), 158.39, 157.36 (dd, $J = 252.0, 12.5$ Hz), 155.83, 154.54, 137.59, 135.82, 134.63, 129.58 (2C), 128.72 (2C), 128.53 (dd, $J = 9.5, 2.2$ Hz), 126.85, 125.11, 124.67, 122.58, 120.77 (dd, $J = 11.7, 3.6$ Hz), 112.17 (dd, $J = 22.0, 3.7$ Hz), 105.44 (dd, $J = 25.7, 23.5$ Hz), 72.51, 71.27, 58.91, 53.78, 53.65, 49.96 (d, $J = 4.4$ Hz), 35.39, 27.48, 20.35, 20.15; HRMS (ESI) m/z : calcd for $C_{31}H_{33}F_2N_4O_6S_2$ $[M + H]^+$ 659.1810; found 659.1817.

(5S)-3-(2,4-Difluorophenyl)-N-[(1S,2R)-2-hydroxy-3-[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (19e). 1H NMR (400 MHz, $CDCl_3$) δ 7.78 (d, $J = 8.4$ Hz, 2H), 7.53 (d, $J = 8.4$ Hz, 2H), 7.37–7.28 (m, 1H), 7.23–7.18 (m, 4H), 7.15–7.11 (m, 1H), 6.96–6.89 (m, 2H), 6.75 (d, $J = 9.6$ Hz, 1H), 4.84 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.80 (s, 2H), 4.23 (m, 1H), 4.06 (t, $J = 9.2$ Hz, 1H), 3.91 (m, 1H), 3.64 (d, $J = 2.8$ Hz, 1H), 3.53 (dd, $J = 9.2, 6.4$ Hz, 1H), 3.22 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.09 (dd, $J = 14.0, 4.0$ Hz, 1H), 3.05–2.97 (m, 2H), 2.88–2.79 (m, 2H), 1.85 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.50, 161.82 (dd, $J = 249.0, 10.9$ Hz), 157.36 (dd, $J = 252.0, 12.4$ Hz), 154.38, 146.55, 137.41, 137.29, 129.57 (2C), 128.77 (2C), 128.49 (dd, $J = 10.3, 3.0$ Hz), 127.85 (2C), 127.46 (2C), 126.90, 120.73 (dd, $J = 11.0, 4.4$ Hz), 112.17 (dd, $J = 22.7, 3.7$ Hz), 105.46 (dd, $J = 25.6, 23.4$ Hz), 72.41, 71.15, 64.44, 59.03, 53.86, 53.53, 49.90 (d, $J = 4.4$ Hz), 35.42, 27.56, 20.37, 20.10; HRMS (ESI) m/z : calcd for $C_{31}H_{36}F_2N_3O_7S$ $[M + H]^+$ 632.2242; found 632.2225.

(5S)-N-[(1S,2R)-3-[[4-(Aminophenyl)sulfonyl](2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(4-fluorophenyl)-2-oxooxazolidine-5-carboxamide (20a). 1H NMR (400 MHz, $CDCl_3$) δ 7.59–7.55 (m, 2H), 7.41–7.37 (m, 2H), 7.12–7.08 (m, 4H), 7.02 (t, $J = 7.6$ Hz, 2H), 6.90 (t, $J = 7.6$ Hz, 1H), 6.74 (d, $J = 9.6$ Hz, 1H), 6.71–6.67 (m, 2H), 4.77 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.25–4.12 (m, 2H), 4.01 (t, $J = 9.6$ Hz, 1H), 3.90 (m, 1H), 3.75 (br s, 1H), 3.33 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.21 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.09 (dd, $J = 13.6, 4.0$ Hz, 1H), 3.02–2.93 (m, 2H), 2.79 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.73 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.83 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J =$

6.8 Hz, 3H); ^{13}C NMR (100 MHz, CDCl_3) δ 168.69, 159.76 (d, $J = 243.2$ Hz), 153.15, 150.99, 137.54, 133.64 (d, $J = 2.9$ Hz), 129.81 (2C), 129.60 (2C), 128.58 (2C), 126.66, 126.29, 120.26 (d, $J = 8.10$ Hz, 2C), 116.12 (d, $J = 22.7$ Hz, 2C), 114.40 (2C), 72.52, 69.78, 59.16, 53.97, 53.43, 48.52, 35.66, 27.61, 20.43, 20.14; HRMS (ESI) m/z : calcd for $\text{C}_{30}\text{H}_{36}\text{FN}_4\text{O}_6\text{S}$ $[\text{M} + \text{H}]^+$ 599.2340; found 599.2343.

(5S)-3-(4-Fluorophenyl)-N-[(1S,2R)-2-hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (20b). ^1H NMR (400 MHz, CDCl_3) δ 7.76–7.72 (m, 2H), 7.41–7.37 (m, 2H), 7.13–7.08 (m, 4H), 7.05–6.98 (m, 4H), 6.92–6.88 (m, 1H), 6.73 (d, $J = 9.6$ Hz, 1H), 4.77 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.23 (m, 1H), 4.02 (t, $J = 9.2$ Hz, 1H), 3.91 (m, 1H), 3.88 (s, 3H), 3.69 (d, $J = 2.8$ Hz, 1H), 3.34 (dd, $J = 8.8, 5.6$ Hz, 1H), 3.23 (dd, $J = 14.8, 8.8$ Hz, 1H), 3.10 (dd, $J = 13.6, 4.4$ Hz, 1H), 3.05–2.95 (m, 2H), 2.81 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.74 (dd, $J = 14.0, 10.8$ Hz, 1H), 1.84 (m, 1H), 0.95 (d, $J = 6.0$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, CDCl_3) δ 168.74, 163.37, 159.77 (d, $J = 243.2$ Hz), 153.11, 137.46, 133.62 (d, $J = 3.0$ Hz), 129.84 (d, $J = 2.2$ Hz), 129.76 (2C), 129.58 (2C), 128.61 (2C), 126.71, 120.26 (d, $J = 8.10$ Hz, 2C), 116.33 (d, $J = 22.7$ Hz, 2C), 114.66 (2C), 72.52, 69.77, 59.13, 55.89, 53.96, 53.47, 48.51, 35.66, 27.60, 20.40, 20.12; HRMS (ESI) m/z : calcd for $\text{C}_{31}\text{H}_{37}\text{FN}_3\text{O}_7\text{S}$ $[\text{M} + \text{H}]^+$ 614.2336; found 614.2341.

(5S)-N-[(1S,2R)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(4-fluorophenyl)-2-oxooxazolidine-5-carboxamide (20c). ^1H NMR (400 MHz, CDCl_3) δ 7.41–7.35 (m, 3H), 7.20 (d, $J = 4.0$ Hz, 1H), 7.14–7.08 (m, 4H), 7.05–7.01 (m, 2H), 6.92–6.88 (m, 2H), 6.80 (d, $J = 8.0$ Hz, 1H), 6.09 (s, 2H), 4.79 (dd, $J = 10.0, 6.0$ Hz, 1H), 4.23 (m, 1H), 4.02 (t, $J = 9.6$ Hz, 1H), 3.92 (m, 1H), 3.35 (dd, $J = 8.8, 5.6$ Hz, 1H), 3.20 (dd, $J = 15.2, 9.6$ Hz, 1H), 3.11 (dd, $J = 14.0, 4.8$ Hz, 1H), 3.03–2.97 (m, 2H), 2.84 (dd, $J = 13.2, 6.4$ Hz, 1H), 2.74 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.85 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, CDCl_3) δ 168.80, 159.78 (d, $J = 243.3$ Hz), 153.18, 151.85, 148.63, 137.51, 133.62 (d, $J = 3.0$ Hz),

131.52 (d, $J = 2.2$ Hz), 129.58 (2C), 128.61 (2C), 126.71, 123.43, 120.28 (d, $J = 8.10$ Hz, 2C), 116.12 (d, $J = 22.0$ Hz, 2C), 108.67, 107.77, 102.65, 72.59, 69.81, 59.18, 53.99, 53.50, 48.54, 35.65, 27.58, 20.39, 20.13; HRMS (ESI) m/z : calcd for $C_{31}H_{35}FN_3O_8S$ [$M + H$]⁺ 628.2129; found 628.2133.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(4-fluorophenyl)-2-oxooxazolidine-5-carboxamide (20d). ¹H NMR (400 MHz, CDCl₃) δ 9.22 (s, 1H), 8.49 (d, $J = 2.0$ Hz, 1H), 8.27 (d, $J = 8.4$ Hz, 1H), 7.92 (dd, $J = 8.8, 2.0$ Hz, 1H), 7.41–7.37 (m, 2H), 7.14–7.07 (m, 4H), 7.03 (t, $J = 7.6$ Hz, 2H), 6.91 (t, $J = 7.6$ Hz, 1H), 6.82 (d, $J = 9.2$ Hz, 1H), 4.77 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.25 (m, 1H), 4.02 (t, $J = 9.2$ Hz, 1H), 3.98 (m, 1H), 3.67 (d, $J = 2.0$ Hz, 1H), 3.36 (dd, $J = 9.2, 6.4$ Hz, 1H), 3.27 (dd, $J = 15.2, 8.8$ Hz, 1H), 3.15–3.04 (m, 3H), 2.92 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.75 (dd, $J = 13.6, 10.4$ Hz, 1H), 1.88 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.86, 159.78 (d, $J = 243.2$ Hz), 158.37, 155.86, 153.26, 137.50, 135.75, 134.66, 133.59 (d, $J = 2.9$ Hz), 129.56 (2C), 128.62 (2C), 126.73, 125.09, 124.71, 122.59, 120.32 (d, $J = 8.10$ Hz, 2C), 116.13 (d, $J = 22.8$ Hz, 2C), 72.57, 69.86, 59.02, 53.88, 53.60, 48.57, 35.64, 27.52, 20.37, 20.13; HRMS (ESI) m/z : calcd for $C_{31}H_{34}FN_4O_6S_2$ [$M + H$]⁺ 641.1904; found 641.1912.

(5S)-3-(4-Fluorophenyl)-N-[(1S,2R)-2-hydroxy-3-[[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (20e). ¹H NMR (400 MHz, CDCl₃) δ 7.78 (m, 2H), 7.53 (d, $J = 8.8$ Hz, 2H), 7.40–7.36 (m, 2H), 7.13–7.08 (m, 4H), 7.04 (t, $J = 7.6$ Hz, 2H), 6.91 (m, 1H), 6.76 (d, $J = 9.6$ Hz, 1H), 4.80 (d, $J = 4.4$ Hz, 2H), 4.76 (dd, $J = 10.0, 5.6$ Hz, 1H), 4.22 (m, 1H), 4.01 (t, $J = 9.2$ Hz, 1H), 3.92 (m, 1H), 3.63 (d, $J = 3.2$ Hz, 1H), 3.34 (dd, $J = 9.6, 6.0$ Hz, 1H), 3.22 (dd, $J = 15.2, 8.8$ Hz, 1H), 3.10 (dd, $J = 14.0, 4.0$ Hz, 1H), 3.05–2.98 (m, 2H), 2.86 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.73 (dd, $J = 13.6, 10.8$ Hz, 1H), 2.10 (br s, 1H), 1.86 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.80, 159.79 (d, $J = 243.2$ Hz), 153.18, 146.56, 137.42, 137.26, 133.58 (d, $J = 3.0$ Hz), 129.56 (2C), 128.63 (2C), 127.85

(2C), 127.48 (2C), 126.73, 120.29 (d, $J = 8.0$ Hz, 2C), 116.14 (d, $J = 22.9$ Hz, 2C), 72.49, 69.79, 64.43, 59.06, 53.88, 53.50, 48.53, 35.63, 27.55, 20.38, 20.10; HRMS (ESI) m/z : calcd for $C_{31}H_{37}FN_3O_7S$ [$M + H$]⁺ 614.2336; found 614.2349.

(5S)-3-(4-Acetylphenyl)-N-[(1S,2R)-3-[(6-benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (21d). ¹H NMR (400 MHz, CDCl₃) δ 9.22 (s, 1H), 8.49 (d, $J = 1.6$ Hz, 1H), 8.27 (d, $J = 8.4$ Hz, 1H), 8.03–8.0 (m, 2H), 7.92 (dd, $J = 8.8, 1.6$ Hz, 1H), 7.55 (d, $J = 8.8$ Hz, 2H), 7.11 (d, $J = 7.2$ Hz, 2H), 6.99 (t, $J = 8.0$ Hz, 2H), 6.83 (t, $J = 7.6$ Hz, 1H), 6.77 (d, $J = 9.6$ Hz, 1H), 4.81 (dd, $J = 9.6, 5.6$ Hz, 1H), 4.26 (m, 1H), 4.08 (t, $J = 9.6$ Hz, 1H), 3.98 (m, 1H), 3.38 (dd, $J = 9.6, 6.0$ Hz, 1H), 3.28 (dd, $J = 15.2, 9.6$ Hz, 1H), 3.14–3.04 (m, 3H), 2.92 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.75 (dd, $J = 13.6, 10.8$ Hz, 1H), 2.62 (s, 3H), 1.88 (m, 1H), 0.96 (d, $J = 6.4$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 197.07, 168.58, 158.36, 155.89, 152.71, 141.53, 137.34, 135.69, 134.68, 133.25, 129.89 (2C), 129.56 (2C), 128.61 (2C), 126.79, 125.05, 124.76, 122.58, 117.62 (2C), 72.54, 69.83, 59.15, 53.97, 53.53, 48.03, 35.61, 27.60, 26.76, 20.38, 20.12; HRMS (ESI) m/z : calcd for $C_{33}H_{37}N_4O_7S_2$ [$M + H$]⁺ 665.2104; found 665.2101.

(5S)-3-(4-Acetylphenyl)-N-[(1S,2R)-2-hydroxy-3-[[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (21e). ¹H NMR (400 MHz, CDCl₃) δ 8.04–8.0 (m, 2H), 7.81–7.78 (m, 2H), 7.56–7.53 (m, 4H), 7.11 (d, $J = 6.4$ Hz, 2H), 6.99 (t, $J = 8.0$ Hz, 2H), 6.82 (t, $J = 7.6$ Hz, 1H), 6.68 (d, $J = 9.6$ Hz, 1H), 4.82–4.78 (m, 3H), 4.23 (m, 1H), 4.07 (t, $J = 10.4$ Hz, 1H), 3.92 (m, 1H), 3.60 (d, $J = 2.8$ Hz, 1H), 3.36 (dd, $J = 9.6, 6.0$ Hz, 1H), 3.25 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.11–2.97 (m, 3H), 2.85 (dd, $J = 13.2, 6.4$ Hz, 1H), 2.74 (dd, $J = 13.6, 11.2$ Hz, 1H), 2.63 (s, 3H), 1.86 (m, 1H), 0.97 (d, $J = 6.8$ Hz, 3H), 0.91 (d, $J = 6.0$ Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 197.09, 168.53, 152.73, 146.56, 141.55, 137.37, 137.24, 133.24, 129.89 (2C), 129.56 (2C), 128.58 (2C), 127.86 (2C), 127.48 (2C), 126.74, 117.62 (2C), 72.46, 69.83, 64.43,

59.09, 53.90, 53.47, 48.02, 35.56, 27.58, 26.75, 20.38, 20.10; HRMS (ESI) m/z : calcd for $C_{33}H_{40}N_3O_8S$ $[M + H]^+$ 638.2536; found 638.2547.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(3-fluorophenyl)-2-oxooxazolidine-5-carboxamide (22d). 1H NMR (400 MHz, $CDCl_3$) δ 9.22 (s, 1H), 8.49 (d, $J = 1.6$ Hz, 1H), 8.27 (d, $J = 8.4$ Hz, 1H), 7.92 (dd, $J = 8.8, 2.0$ Hz, 1H), 7.38–7.33 (m, 2H), 7.13–7.07 (m, 3H), 7.04–7.0 (m, 2H), 6.92–6.87 (m, 2H), 6.77 (d, $J = 9.6$ Hz, 1H), 4.77 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.25 (m, 1H), 4.02 (t, $J = 9.6$ Hz, 1H), 3.97 (m, 1H), 3.64 (br s, 1H), 3.33 (dd, $J = 9.6, 6.0$ Hz, 1H), 3.27 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.15–3.05 (m, 3H), 2.92 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.75 (dd, $J = 14.0, 10.8$ Hz, 1H), 1.88 (m, 1H), 0.96 (d, $J = 6.8$ Hz, 3H), 0.91 (d, $J = 6.0$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.71, 163.25 (d, $J = 243.9$ Hz), 158.33, 155.90, 152.79, 139.0 (d, $J = 11.0$ Hz), 137.34, 135.72, 134.68, 130.58 (d, $J = 9.6$ Hz), 129.53 (2C), 128.65 (2C), 126.79, 125.06, 124.74, 122.58, 113.54 (d, $J = 2.9$ Hz), (2C), 111.63 (d, $J = 21.2$ Hz), 106.11 (d, $J = 26.3$ Hz), 72.55, 69.80, 59.12, 53.96, 53.56, 48.23, 35.66, 27.58, 20.38, 20.12; HRMS (ESI) m/z : calcd for $C_{31}H_{34}FN_4O_6S_2$ $[M + H]^+$ 641.1904; found 641.1898.

(5S)-3-(3-Fluorophenyl)-N-[(1S,2R)-2-hydroxy-3-[[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (22e). 1H NMR (400 MHz, $CDCl_3$) δ 7.77 (d, $J = 8.4$ Hz, 2H), 7.52 (d, $J = 8.4$ Hz, 2H), 7.38–7.33 (m, 2H), 7.12–7.06 (m, 3H), 7.01 (t, $J = 7.6$ Hz, 2H), 6.92–6.86 (m, 2H), 6.80 (d, $J = 10.0$ Hz, 1H), 4.79 (s, 2H), 4.76 (dd, $J = 10.0, 6.0$ Hz, 1H, overlapping signal), 4.23 (m, 1H), 4.01 (t, $J = 9.2$ Hz, 1H), 3.93 (m, 1H), 3.65 (br s, 1H), 3.29 (dd, $J = 9.6, 6.4$ Hz, 1H), 3.21 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.09 (dd, $J = 13.6, 4.0$ Hz, 1H), 3.05–2.98 (m, 2H), 2.87 (dd, $J = 13.6, 7.2$ Hz, 1H), 2.73 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.86 (m, 1H), 0.94 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.71, 163.24 (d, $J = 244.7$ Hz), 152.89, 146.61, 139.0 (d, $J = 10.3$ Hz), 137.42, 137.24, 130.57 (d, $J = 9.5$ Hz), 129.54 (2C), 128.60 (2C), 127.83 (2C), 127.48 (2C), 126.72, 113.56 (d, $J = 2.9$ Hz), 111.63 (d, $J = 21.3$ Hz), 106.12

(d, $J = 27.1$ Hz), 72.49, 69.83, 64.41, 59.01, 53.83, 54.0, 48.25, 35.61, 27.52, 20.36, 20.11; HRMS (ESI) m/z : calcd for $C_{31}H_{37}FN_3O_7S$ $[M + H]^+$ 614.2336; found 614.2305.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(3,4-difluorophenyl)-2-oxooxazolidine-5-carboxamide (23d). 1H NMR (400 MHz, $CDCl_3$) δ 9.22 (s, 1H), 8.49 (d, $J = 2.0$ Hz, 1H), 8.28 (d, $J = 8.4$ Hz, 1H), 7.91 (dd, $J = 8.8, 1.6$ Hz, 1H), 7.54–7.48 (m, 1H), 7.19 (ABd, $J = 9.2$ Hz, 1H), 7.12 (d, $J = 7.6$ Hz, 2H), 7.04 (t, $J = 7.6$ Hz, 2H), 7.01–6.97 (m, 1H), 6.91 (t, $J = 7.2$ Hz, 1H), 6.73 (d, $J = 9.6$ Hz, 1H), 4.77 (dd, $J = 10.0, 6.0$ Hz, 1H), 4.26 (m, 1H), 4.02–3.94 (m, 2H), 3.61 (br s, 1H), 3.33 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.28 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.14–3.03 (m, 3H), 2.91 (dd, $J = 14.0, 6.8$ Hz, 1H), 2.75 (dd, $J = 14.0, 10.8$ Hz, 1H), 1.87 (m, 1H), 0.97 (d, $J = 6.4$ Hz, 3H), 0.91 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.60, 158.38, 155.87, 152.92, 150.44 (dd, $J = 246.2, 13.2$ Hz), 147.39 (dd, $J = 245.4, 12.4$ Hz), 137.47, 135.73, 134.67, 134.04 (dd, $J = 8.8, 2.9$ Hz), 129.57 (2C), 128.60 (2C), 126.71, 125.07, 124.71, 122.58, 117.68 (d, $J = 17.5$ Hz), 113.91 (dd, $J = 5.9, 3.7$ Hz), 108.42 (d, $J = 22.7$ Hz), 72.57, 69.78, 59.04, 53.88, 53.52, 48.32, 35.55, 27.53, 20.36, 20.13; HRMS (ESI) m/z : calcd for $C_{31}H_{33}F_2N_4O_6S_2$ $[M + H]^+$ 659.1810; found 659.1784.

(5S)-3-(3,4-Difluorophenyl)-N-[(1S,2R)-2-hydroxy-3-[[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (23e). 1H NMR (400 MHz, $CDCl_3$) δ 7.77 (d, $J = 8.4$ Hz, 2H), 7.53–7.47 (m, 3H), 7.19 (ABd, $J = 9.2$ Hz, 1H), 7.10 (d, $J = 7.6$ Hz, 2H), 7.02 (t, $J = 7.6$ Hz, 2H), 6.97 (m, 1H, overlapping), 6.90 (t, $J = 7.6$ Hz, 1H), 6.85 (d, $J = 9.6$ Hz, 1H), 4.78 (s, 2H), 4.76 (m, 1H, overlapping), 4.24 (m, 1H), 3.98 (t, $J = 9.6$ Hz, 1H), 3.94 (br s, 1H), 3.67 (br s, 1H), 3.28 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.20 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.11–2.97 (m, 3H), 2.87 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.73 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.85 (m, 1H), 0.93 (d, $J = 6.8$ Hz, 3H), 0.90 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.59, 152.98, 150.44 (dd, $J = 246.1, 13.2$ Hz), 147.39 (dd, $J = 245.4, 12.4$ Hz), 146.64, 137.51, 137.20, 134.03 (dd, $J = 8.1, 3.0$ Hz),

129.57 (2C), 128.57 (2C), 127.83 (2C), 127.47 (2C), 126.66, 117.68 (d, $J = 18.3$ Hz), 113.91 (dd, $J = 5.9, 3.7$ Hz), 108.42 (d, $J = 22.7$ Hz), 72.51, 69.78, 64.38, 58.98, 53.78, 53.45, 48.32, 35.50, 27.49, 20.35, 20.12; HRMS (ESI) m/z : calcd for $C_{31}H_{36}F_2N_3O_7S$ $[M + H]^+$ 632.2242; found 632.2234.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-[(3-(trifluoromethyl)phenyl)oxazolidine-5-carboxamide (24d). 1H NMR (400 MHz, $CDCl_3$) δ 9.23 (s, 1H), 8.50 (d, $J = 1.6$ Hz, 1H), 8.28 (d, $J = 8.8$ Hz, 1H), 7.92 (dd, $J = 8.4, 1.6$ Hz, 1H), 7.70 (d, $J = 8.0$ Hz, 1H), 7.63 (s, 1H), 7.54 (t, $J = 8.0$ Hz, 1H), 7.46 (d, $J = 8.0$ Hz, 1H), 7.12 (d, $J = 8.0$ Hz, 2H), 7.0 (t, $J = 7.6$ Hz, 2H), 6.85 (t, $J = 7.6$ Hz, 1H), 6.75 (d, $J = 10.0$ Hz, 1H), 4.80 (dd, $J = 10.0, 5.6$ Hz, 1H), 4.26 (m, 1H), 4.05 (t, $J = 9.2$ Hz, 1H), 3.97 (br s, 1H), 3.61 (br s, 1H), 3.36 (dd, $J = 9.6, 6.0$ Hz, 1H), 3.29 (dd, $J = 15.2, 8.8$ Hz, 1H), 3.15–3.04 (m, 3H), 2.91 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.75 (dd, $J = 14.0, 10.8$ Hz, 1H), 1.88 (m, 1H), 0.97 (d, $J = 6.8$ Hz, 3H), 0.92 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.60, 158.34, 155.92, 152.80, 138.08, 137.31, 135.68, 134.69, 131.83 (d, $J = 32.3$ Hz), 130.0, 129.54 (2C), 128.65 (2C), 126.74, 125.04, 124.77, 122.58, 121.42, 121.36 (q, $J = 3.7$ Hz), 115.05 (q, $J = 3.7$ Hz), 72.57, 69.84, 59.17, 53.99, 53.46, 48.12, 35.63, 27.62, 20.39, 20.11; HRMS (ESI) m/z : calcd for $C_{32}H_{34}F_3N_4O_6S_2$ $[M + H]^+$ 691.1872; found 691.1882.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxo-3-[(3-(trifluoromethyl)phenyl)oxazolidine-5-carboxamide (24e). 1H NMR (400 MHz, $CDCl_3$) δ 7.79 (m, 2H), 7.69 (dd, $J = 8.0, 2.0$ Hz, 1H), 7.63 (s, 1H), 7.56–7.52 (m, 3H), 7.46 (d, $J = 8.0$ Hz, 1H), 7.11 (dd, $J = 8.0, 1.2$ Hz, 2H), 6.99 (t, $J = 7.6$ Hz, 2H), 6.84 (m, 1H), 6.76 (d, $J = 9.6$ Hz, 1H), 4.82–4.78 (m, 3H), 4.25 (m, 1H), 4.04 (t, $J = 9.6$ Hz, 1H), 3.93 (m, 1H), 3.61 (d, $J = 3.2$ Hz, 1H), 3.33 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.23 (dd, $J = 15.2, 9.6$ Hz, 1H), 3.12–2.99 (m, 3H), 2.86 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.73 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.86 (m, 1H), 0.96 (d, $J = 6.8$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.58, 152.88, 146.56, 138.09, 137.37, 137.26, 131.82 (d, $J = 32.2$ Hz), 129.99, 129.55 (2C), 128.60 (2C), 127.86 (2C), 127.48 (2C), 126.68,

123.95 (d, $J = 271.1$ Hz), 121.42, 121.34 (m), 115.06 (m), 72.50, 69.86, 64.43, 59.08, 53.89, 53.39, 48.13, 35.58, 27.56, 20.38, 20.10; HRMS (ESI) m/z : calcd for $C_{32}H_{37}F_3N_3O_7S$ $[M + H]^+$ 664.2304; found 664.2298.

(5S)-N-[(1S,2R)-3-[[4-(Aminophenyl)sulfonyl](2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-[(3-(trifluoromethoxy)phenyl)oxazolidine-5-carboxamide (25a).

1H NMR (400 MHz, $CDCl_3$) δ 7.59–7.55 (m, 2H), 7.45–7.40 (m, 2H), 7.33 (m, 1H), 7.10 (dd, $J = 8.0$, 1.2 Hz, 2H), 7.06 (m, 1H), 6.98 (t, $J = 7.6$ Hz, 2H), 6.82 (t, $J = 7.6$ Hz, 1H), 6.78 (d, $J = 10.0$ Hz, 1H), 6.71–6.67 (m, 2H), 4.78 (dd, $J = 10.4$, 6.0 Hz, 1H), 4.23 (m, 1H), 4.19 (br s, 2H), 4.01 (t, $J = 9.2$ Hz, 1H), 3.93 (m, 1H), 3.74 (br s, 1H), 3.29 (dd, $J = 9.2$, 6.0 Hz, 1H), 3.20 (dd, $J = 15.2$, 9.6 Hz, 1H), 3.09 (dd, $J = 14.4$, 4.4 Hz, 1H), 3.01–2.95 (m, 2H), 2.80 (dd, $J = 13.6$, 6.8 Hz, 1H), 2.72 (dd, $J = 13.6$, 10.8 Hz, 1H), 1.83 (m, 1H), 0.94 (d, $J = 6.4$ Hz, 3H), 0.89 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.52, 152.82, 151.04, 149.91, 139.01, 137.53, 130.49, 129.80 (2C), 128.58 (2C), 128.52 (2C), 126.57, 126.21, 120.66 (d, $J = 255.7$ Hz), 116.84, 116.26, 114.38 (2C), 111.35, 72.53, 69.82, 59.13, 53.92, 53.39, 48.16, 35.61, 27.58, 20.41, 20.15; HRMS (ESI) m/z : calcd for $C_{31}H_{36}F_3N_4O_7S$ $[M + H]^+$ 665.2257; found 665.2246.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxo-3-[(3-(trifluoromethoxy)phenyl)oxazolidine-5-carboxamide (25b).

1H NMR (400 MHz, $CDCl_3$) δ 7.76–7.72 (m, 2H), 7.45–7.41 (m, 2H), 7.34 (dd, $J = 8.0$, 1.6 Hz, 1H), 7.11 (d, $J = 7.6$ Hz, 2H), 7.08–7.05 (m, 1H), 7.02–6.98 (m, 4H), 6.83 (t, $J = 7.6$ Hz, 1H), 6.70 (d, $J = 10.0$ Hz, 1H), 4.78 (dd, $J = 10.4$, 6.0 Hz, 1H), 4.25 (m, 1H), 4.02 (t, $J = 9.2$ Hz, 1H), 3.92 (m, 1H), 3.88 (s, 3H), 3.68 (d, $J = 2.8$ Hz, 1H), 3.32 (dd, $J = 8.8$, 5.6 Hz, 1H), 3.23 (dd, $J = 14.8$, 9.2 Hz, 1H), 3.10 (dd, $J = 14.0$, 6.4 Hz, 1H), 3.03 (dd, $J = 13.6$, 8.8 Hz, 1H), 2.98 (dd, $J = 15.6$, 2.8 Hz, 1H), 2.82 (dd, $J = 13.2$, 6.4 Hz, 1H), 2.73 (dd, $J = 13.6$, 10.8 Hz, 1H), 1.88–1.81 (m, 1H), 0.96 (d, $J = 6.8$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.55, 163.39, 152.71, 149.90 (d, $J = 2.2$ Hz),

138.97, 137.40, 130.50, 129.83, 129.76 (2C), 129.56 (2C), 128.57 (2C), 126.64, 120.66 (d, $J = 256.4$ Hz), 116.68, 116.24, 114.67 (2C), 111.34, 72.51, 69.77, 59.15, 55.89, 53.94, 53.40, 48.13, 35.61, 27.61, 20.40, 20.11; HRMS (ESI) m/z : calcd for $C_{32}H_{37}F_3N_3O_8S$ $[M + H]^+$ 680.2253; found 680.2242.

(5S)-N-[(1S,2R)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-[(3-(trifluoromethoxy)phenyl)oxazolidine-5-carboxamide (25c).

1H NMR (400 MHz, $CDCl_3$) δ 7.45–7.41 (m, 2H), 7.38–7.33 (m, 2H), 7.20 (d, $J = 2.0$ Hz, 1H), 7.11 (dd, $J = 8.4, 1.2$ Hz, 2H), 7.08–7.05 (m, 1H), 7.01 (t, $J = 7.6$ Hz, 2H), 6.91 (d, $J = 8.4$ Hz, 1H), 6.84 (m, 1H), 6.71 (d, $J = 10.0$ Hz, 1H), 6.09 (s, 2H), 4.79 (dd, $J = 10.0, 5.6$ Hz, 1H), 4.24 (m, 1H), 4.02 (t, $J = 9.6$ Hz, 1H), 3.92 (m, 1H), 3.61 (d, $J = 3.2$ Hz, 1H), 3.32 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.22 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.10 (dd, $J = 14.0, 4.8$ Hz, 1H), 3.04–2.97 (m, 2H), 2.83 (dd, $J = 13.6, 6.4$ Hz, 1H), 2.73 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.85 (m, 1H), 0.96 (d, $J = 6.8$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.58, 152.71, 151.87, 149.89, 148.65, 138.97, 137.37, 131.48, 130.50, 129.55 (2C), 128.59 (2C), 126.67, 123.43, 120.66 (d, $J = 256.4$ Hz), 116.87, 116.25, 111.34, 108.68, 107.76, 102.66, 72.58, 69.78, 59.25, 54.02, 53.42, 48.13, 35.63, 27.61, 20.40, 20.11; HRMS (ESI) m/z : calcd for $C_{32}H_{35}F_3N_3O_9S$ $[M + H]^+$ 694.2046; found 694.2051.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxo-3-[(3-(trifluoromethoxy)phenyl)oxazolidine-5-carboxamide (25d).

1H NMR (400 MHz, $CDCl_3$) δ 9.22 (s, 1H), 8.49 (d, $J = 1.6$ Hz, 1H), 8.27 (d, $J = 8.4$ Hz, 1H), 7.92 (dd, $J = 8.8, 2.0$ Hz, 1H), 7.45–7.40 (m, 2H), 7.35–7.32 (m, 1H), 7.11 (d, $J = 7.2$ Hz, 2H), 7.08–7.05 (m, 1H), 7.01 (t, $J = 7.6$ Hz, 2H), 6.84 (t, $J = 7.2$ Hz, 1H), 6.76 (d, $J = 9.6$ Hz, 1H), 4.78 (dd, $J = 10.4, 6.0$ Hz, 1H), 4.26 (m, 1H), 4.03 (t, $J = 9.6$ Hz, 1H), 3.97 (m, 1H), 3.63 (d, $J = 3.2$ Hz, 1H), 3.33 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.28 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.15–3.05 (m, 3H), 2.92 (dd, $J = 13.2, 6.4$ Hz, 1H), 2.75 (dd, $J = 13.6, 10.4$ Hz, 1H), 1.88 (m, 1H), 0.96 (d, $J = 6.8$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.63, 158.36, 155.90, 152.74, 149.90 (d, $J = 2.2$ Hz), 138.94, 137.33,

135.69, 134.68, 130.52, 129.53 (2C), 128.62 (2C), 126.71, 125.05, 124.75, 122.58, 120.66 (d, $J = 256.4$ Hz), 116.90, 116.25, 111.36, 72.57, 69.80, 59.13, 53.96, 53.50, 48.15, 35.64, 27.59, 20.38, 20.11; HRMS (ESI) m/z : calcd for $C_{32}H_{34}F_3N_4O_7S_2$ $[M + H]^+$ 707.1821; found 707.1834.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxo-3-[(3-(trifluoromethoxy)phenyl)oxazolidine-5-carboxamide (25e).

1H NMR (400 MHz, $CDCl_3$) δ 7.77 (d, $J = 8.0$ Hz, 2H), 7.52 (d, $J = 8.0$ Hz, 2H), 7.44–7.40 (m, 2H), 7.10 (d, $J = 6.8$ Hz, 2H), 7.06 (m, 1H), 6.99 (t, $J = 7.6$ Hz, 2H), 6.85–6.81 (m, 2H), 4.79–4.75 (m, 3H), 4.24 (m, 1H), 4.01 (t, $J = 9.2$ Hz, 1H), 3.94 (m, 1H), 3.65 (d, $J = 2.8$ Hz, 1H), 3.29 (dd, $J = 9.6, 6.0$ Hz, 1H), 3.20 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.11–2.97 (m, 3H), 2.87 (dd, $J = 13.6, 7.2$ Hz, 1H), 2.72 (dd, $J = 13.6, 10.8$ Hz, 1H), 2.28 (br s, 1H), 1.86 (m, 1H), 0.93 (d, $J = 6.0$ Hz, 3H), 0.90 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.65, 152.87, 149.90, 146.63, 138.95, 137.43, 137.23, 130.50, 129.54 (2C), 128.55 (2C), 127.83 (2C), 127.47 (2C), 126.63, 120.66 (d, $J = 256.4$ Hz), 116.88, 116.27, 111.36, 72.52, 69.84, 64.39, 58.99, 53.80, 53.46, 48.18, 35.58, 27.50, 20.35, 20.11; HRMS (ESI) m/z : calcd for $C_{32}H_{37}F_3N_3O_8S$ $[M + H]^+$ 680.2253; found 680.2255.

(5S)-3-(3-Acetylphenyl)-N-[(1S,2R)-3-[(6-benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (26d). 1H NMR (400 MHz, $CDCl_3$) δ 9.22 (s, 1H), 8.49 (d, $J = 1.6$ Hz, 1H), 8.26 (d, $J = 8.4$ Hz, 1H), 7.92 (m, 2H), 7.82–7.76 (m, 2H), 7.52 (d, $J = 8.0$ Hz, 1H), 7.13 (dd, $J = 7.2, 1.2$ Hz, 2H), 7.02 (dt, $J = 7.2, 1.2$ Hz, 1H), 6.87 (t, $J = 7.6$ Hz, 1H), 6.83 (d, $J = 10.0$ Hz, 1H), 4.80 (dd, $J = 9.6, 5.6$ Hz, 1H), 4.26 (m, 1H), 4.06 (t, $J = 10.0$ Hz, 1H), 3.98 (m, 1H), 3.68 (d, $J = 3.2$ Hz, 1H), 3.41 (dd, $J = 9.6, 6.4$ Hz, 1H), 3.28 (dd, $J = 15.2, 9.6$ Hz, 1H), 3.16–3.06 (m, 3H), 2.93 (dd, $J = 13.2, 6.4$ Hz, 1H), 2.76 (dd, $J = 13.6, 10.4$ Hz, 1H), 2.65 (s, 3H), 1.89 (m, 1H), 0.96 (d, $J = 6.0$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 197.65, 168.70, 158.31, 155.89, 153.07, 138.09, 138.08, 137.42, 135.75, 134.67, 129.72, 129.57 (2C), 128.65 (2C), 126.77, 125.05, 124.84, 124.74, 123.04, 122.57, 117.58, 72.61, 69.94, 59.12, 53.95,

53.56, 48.26, 35.72, 27.58, 26.98, 20.37, 20.12; HRMS (ESI) m/z : calcd for $C_{33}H_{37}N_4O_7S_2$ $[M + H]^+$ 665.2104; found 665.2104.

(5S)-3-(3-Acetylphenyl)-N-[(1S,2R)-2-hydroxy-3-[[4-(hydroxymethyl)phenyl]sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (26e). 1H NMR (400 MHz, $CDCl_3$) δ 7.92 (t, $J = 2.0$ Hz, 2H), 7.80–7.76 (m, 4H), 7.54–7.50 (m, 3H), 7.12 (d, $J = 7.2$ Hz, 2H), 7.0 (t, $J = 7.2$ Hz, 2H), 6.89–6.84 (m, 2H), 4.80 (dd, $J = 9.6, 5.6$ Hz, 1H, overlapping signal), 4.78 (s, 2H), 4.23 (m, 1H), 4.06 (t, $J = 9.2$ Hz, 1H), 3.96 (m, 1H), 3.70 (br s, 1H), 3.38 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.20 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.11 (dd, $J = 14.0, 4.8$ Hz, 1H), 3.06–2.98 (m, 2H), 2.88 (dd, $J = 13.6, 6.4$ Hz, 1H), 2.75 (dd, $J = 13.6, 10.8$ Hz, 1H), 2.65 (s, 3H), 2.20 (br s, 1H), 1.87 (m, 1H), 0.94 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 197.73, 168.69, 153.17, 146.58, 138.11, 137.51, 137.26, 129.72, 129.58 (2C), 128.60 (2C), 127.84 (2C), 127.46 (2C), 126.71, 124.84, 123.06, 117.64, 72.51, 69.96, 64.40, 59.03, 53.85, 53.51, 48.28, 35.68, 27.51, 26.98, 20.36, 20.12; HRMS (ESI) m/z : calcd for $C_{33}H_{40}N_3O_8S$ $[M + H]^+$ 638.2536; found 638.2543.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-3-[(3-methylsulfonyl)phenyl]-2-oxooxazolidine-5-carboxamide (27b). 1H NMR (400 MHz, $CDCl_3$) δ 8.01 (t, $J = 1.6$ Hz, 1H), 7.80–7.72 (m, 4H), 7.63 (t, $J = 8.0$ Hz, 1H), 7.13 (m, 2H), 7.03–6.96 (m, 4H), 6.94 (d, $J = 10.0$ Hz, 1H), 6.86 (t, $J = 7.6$ Hz, 1H), 4.82 (dd, $J = 10.4, 6.0$ Hz, 1H), 4.25 (m, 1H), 4.06 (t, $J = 9.2$ Hz, 1H), 4.0 (m, 1H), 3.86 (s, 3H), 3.75 (d, $J = 2.8$ Hz, 1H), 3.39 (dd, $J = 8.8, 5.6$ Hz, 1H), 3.21–3.10 (m, 2H), 3.11 (s, 3H, overlapping signal), 3.02 (dd, $J = 14.4, 2.4$ Hz, 1H), 2.97 (dd, $J = 13.6, 7.6$ Hz, 1H), 2.85 (dd, $J = 13.2, 7.2$ Hz, 1H), 2.77 (dd, $J = 14.0, 11.2$ Hz, 1H), 1.86 (m, 1H), 0.94 (d, $J = 6.8$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.37, 163.36, 152.95, 141.85, 138.71, 137.64, 130.57, 129.84, 129.76 (2C), 129.64 (2C), 128.56 (2C), 126.63, 123.20, 123.18, 117.01, 114.64 (2C), 72.67, 70.0, 59.12, 55.89, 53.89, 53.45, 48.14,

44.66, 35.70, 27.51, 20.38, 20.13; HRMS (ESI) m/z : calcd for $C_{32}H_{40}N_3O_9S_2$ $[M + H]^+$ 674.2206; found 674.2217.

(5S)-N-[(1S,2R)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-[(3-methylsulfonyl)phenyl]-2-oxooxazolidine-5-carboxamide (27c). 1H NMR (400 MHz, $CDCl_3$) δ 8.15 (t, $J = 1.6$ Hz, 1H), 7.79–7.76 (m, 1H), 7.69–7.61 (m, 2H), 7.35 (dd, $J = 8.0, 2.0$ Hz, 1H), 7.22 (d, $J = 9.6$ Hz, 1H), 7.19 (d, $J = 1.6$ Hz, 1H), 7.15 (br d, $J = 7.2$ Hz, 2H), 7.01 (t, $J = 7.2$ Hz, 2H), 6.89–6.83 (m, 2H), 6.03 (dd, $J = 17.2, 1.6$ Hz, 2H), 4.84 (dd, $J = 9.6, 5.6$ Hz, 1H), 4.24 (m, 1H), 4.11–4.03 (m, 2H), 3.38 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.19 (dd, $J = 13.6, 4.4$ Hz, 1H), 3.12 (s, 3H), 3.09 (m, 2H), 2.94–2.86 (m, 2H), 2.79 (dd, $J = 14.0, 11.2$ Hz, 1H), 1.90 (m, 1H), 0.93 (d, $J = 6.8$ Hz, 3H, overlapping signal), 0.92 (d, $J = 6.4$ Hz, 3H, overlapping signal); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.51, 153.16, 151.76, 148.55, 141.78, 138.75, 137.87, 131.42, 130.53, 129.68 (2C), 128.52 (2C), 126.55, 123.38, 123.20, 123.17, 117.37, 108.62, 107.83, 102.61, 72.91, 70.08, 59.23, 53.96, 53.56, 48.24, 44.70, 35.97, 27.41, 20.34, 20.16; HRMS (ESI) m/z : calcd for $C_{32}H_{38}N_3O_{10}S_2$ $[M + H]^+$ 688.1999; found 688.2007.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-[(3-methylsulfonyl)phenyl]-2-oxooxazolidine-5-carboxamide (27d). 1H NMR (400 MHz, $CDCl_3$) δ 9.19 (s, 1H), 8.49 (d, $J = 2.0$ Hz, 1H), 8.25 (d, $J = 8.8$ Hz, 1H), 8.13 (t, $J = 2.0$ Hz, 1H), 7.91 (dd, $J = 9.2, 2.0$ Hz, 1H), 7.77 (m, 1H), 7.70–7.61 (m, 2H), 7.16 (m, 3H), 7.02 (t, $J = 8.0$ Hz, 2H), 6.87 (t, $J = 7.2$ Hz, 1H), 4.81 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.26 (m, 1H), 4.11 (m, 1H), 4.05 (t, $J = 9.2$ Hz, 1H), 3.79 (br s, 1H), 3.39 (dd, $J = 8.8, 5.6$ Hz, 1H), 3.22–3.17 (m, 3H), 3.12 (s, 3H), 3.0 (d, $J = 8.4$ Hz, 2H), 2.81 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.92 (m, 1H), 0.92 (d, $J = 6.8$ Hz, 3H, overlapping signal), 0.92 (d, $J = 6.4$ Hz, 3H, overlapping signal); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.49, 158.38, 155.86, 153.10, 141.82, 138.68, 137.73, 135.72, 134.64, 130.57, 129.66 (2C), 128.56 (2C), 126.64,

125.07, 124.69, 123.25, 123.13, 122.60, 117.26, 72.82, 70.07, 59.09, 53.83, 53.64, 48.21, 44.68, 35.93, 27.43, 20.34, 20.14; HRMS (ESI) m/z : calcd for $C_{32}H_{37}N_4O_8S_3$ $[M + H]^+$ 701.1774; found 701.1761.

(5S)-N-[(1S,2R)-2-Hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-3-(3-nitrophenyl)-2-oxooxazolidine-5-carboxamide (28b). 1H NMR (400 MHz, $CDCl_3$) δ 8.20 (t, $J = 2.0$ Hz, 1H), 8.06 (m, 1H), 7.93 (m, 1H), 7.76–7.72 (m, 2H), 7.60 (t, $J = 8.8$ Hz, 1H), 7.12 (d, $J = 7.6$ Hz, 2H), 7.03–6.99 (m, 4H), 6.84 (t, $J = 7.6$ Hz, 1H), 6.72 (d, $J = 9.6$ Hz, 1H), 4.83 (dd, $J = 9.6, 5.6$ Hz, 1H), 4.28 (m, 1H), 4.08 (t, $J = 9.6$ Hz, 1H), 3.95 (m, 1H), 3.88 (s, 3H), 3.68 (br s, 1H), 3.39 (dd, $J = 8.8, 5.6$ Hz, 1H), 3.24 (dd, $J = 15.2, 9.6$ Hz, 1H), 3.11–2.96 (m, 3H), 2.82 (dd, $J = 13.2, 6.8$ Hz, 1H), 2.75 (dd, $J = 14.0, 10.8$ Hz, 1H), 1.85 (m, 1H), 0.96 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.24, 163.40, 152.72, 148.86, 138.73, 137.46, 130.32, 129.79, 129.76 (2C), 128.63 (2C), 128.58 (2C), 126.62, 123.92, 119.32, 114.68 (2C), 112.95, 72.49, 69.91, 59.17, 55.91, 53.93, 53.31, 48.06, 35.47, 27.61, 20.41, 20.12; HRMS (ESI) m/z : calcd for $C_{31}H_{37}N_4O_9S$ $[M + H]^+$ 641.2281; found 641.2275.

(5S)-N-[(1S,2R)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(3-nitrophenyl)-2-oxooxazolidine-5-carboxamide (28c). 1H NMR (400 MHz, $CDCl_3$) δ 8.21 (t, $J = 2.0$ Hz, 1H), 8.05 (m, 1H), 7.92 (m, 1H), 7.60 (t, $J = 8.4$ Hz, 1H), 7.37 (dd, $J = 8.4, 2.0$ Hz, 1H), 7.20 (d, $J = 2.0$ Hz, 1H), 7.13 (dd, $J = 8.4, 1.2$ Hz, 1H), 7.01 (t, $J = 7.2$ Hz, 1H), 6.90 (d, $J = 8.4$ Hz, 1H), 6.84 (m, 1H), 6.78 (d, $J = 10.0$ Hz, 1H), 6.09 (s, 2H), 4.85 (dd, $J = 10.0, 5.6$ Hz, 1H), 4.27 (m, 1H), 4.09 (t, $J = 9.6$ Hz, 1H), 3.96 (m, 1H), 3.63 (d, $J = 2.8$ Hz, 1H), 3.40 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.21 (dd, $J = 15.2, 8.8$ Hz, 1H), 3.10 (dd, $J = 14.4, 4.4$ Hz, 1H), 3.04–2.98 (m, 2H), 2.84 (dd, $J = 13.2, 6.4$ Hz, 1H), 2.75 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.86 (m, 1H), 0.96 (d, $J = 6.8$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.30, 152.77, 151.89, 148.86, 148.65, 138.72, 137.48, 131.45, 130.32, 129.62 (2C), 128.59 (2C), 126.63, 123.93, 123.42, 119.32, 112.98,

108.69, 107.75, 102.67, 72.58, 69.94, 59.24, 53.99, 53.35, 48.09, 35.51, 27.60, 20.40, 20.12; HRMS (ESI) m/z : calcd for $C_{31}H_{35}N_4O_{10}S$ $[M + H]^+$ 655.2074; found 655.2085.

(5S)-N-[(1S,2R)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-3-(3-nitrophenyl)-2-oxooxazolidine-5-carboxamide (28d). 1H NMR (400 MHz, $CDCl_3$) δ 9.23 (s, 1H), 8.50 (d, $J = 1.6$ Hz, 1H), 8.28 (d, $J = 8.4$ Hz, 1H), 8.22 (t, $J = 2.0$ Hz, 1H), 8.05 (m, 1H), 7.93–7.90 (m, 2H), 7.60 (t, $J = 8.4$ Hz, 1H), 7.13 (d, $J = 7.2$ Hz, 2H), 7.02 (t, $J = 7.2$ Hz, 2H), 6.85 (t, $J = 7.2$ Hz, 1H), 6.79 (d, $J = 10.0$ Hz, 1H), 4.84 (dd, $J = 9.6, 5.2$ Hz, 1H), 4.29 (m, 1H), 4.09 (t, $J = 9.2$ Hz, 1H), 3.99 (m, 1H), 3.41 (dd, $J = 9.2, 6.0$ Hz, 1H), 3.29 (dd, $J = 15.6, 9.6$ Hz, 1H), 3.14–3.05 (m, 3H), 2.93 (dd, $J = 13.2, 6.4$ Hz, 1H), 2.78 (dd, $J = 13.6, 10.4$ Hz, 1H), 1.89 (m, 1H), 0.96 (d, $J = 6.8$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.36, 158.38, 155.90, 152.82, 148.86, 138.69, 137.44, 135.68, 134.69, 130.33, 129.61 (2C), 128.62 (2C), 126.67, 125.05, 124.75, 123.92, 122.59, 119.35, 113.01, 72.58, 69.98, 59.12, 53.91, 53.45, 48.10, 35.53, 27.57, 20.38, 20.13; HRMS (ESI) m/z : calcd for $C_{31}H_{34}N_5O_8S$ $[M + H]^+$ 668.1849; found 668.1852.

(5S)-3-(3-Aminophenyl)-N-[(1S,2R)-2-hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (29b). 1H NMR (400 MHz, $CDCl_3$) δ 7.76–7.72 (m, 2H), 7.15 (t, $J = 8.4$ Hz, 1H), 7.12 (t, $J = 7.2$ Hz, 2H, overlapping signal), 7.08–7.04 (m, 3H), 7.01–6.93 (m, 3H), 6.74 (d, $J = 10.0$ Hz, 1H), 6.56 (dd, $J = 8.0, 1.6$ Hz, 1H), 6.51 (dd, $J = 7.6, 1.6$ Hz, 1H), 4.74 (dd, $J = 10.0, 6.4$ Hz, 1H), 4.20 (m, 1H), 4.0 (t, $J = 10.0$ Hz, 1H), 3.91 (m, 1H), 3.87 (s, 3H), 3.73 (br s, 1H), 3.32 (dd, $J = 9.2, 6.4$ Hz, 1H), 3.22 (dd, $J = 14.8, 8.8$ Hz, 1H), 3.12 (dd, $J = 13.6, 4.4$ Hz, 1H), 3.04–2.94 (m, 2H), 2.81 (dd, $J = 13.2, 6.8$ Hz, 1H), 2.73 (dd, $J = 13.6, 10.4$ Hz, 1H), 1.85 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.90 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.97, 163.35, 153.07, 147.54, 138.50, 137.50, 130.08, 129.83, 129.78 (2C), 129.56 (2C), 128.67 (2C), 126.79, 114.66 (2C), 111.74, 108.32, 105.40, 72.48, 69.83, 59.13, 55.89, 54.0,

53.61, 48.45, 35.84, 27.57, 20.40, 20.11; HRMS (ESI) m/z : calcd for $C_{31}H_{39}N_4O_7S$ $[M + H]^+$ 611.2539; found 611.2523.

(5S)-3-(3-Aminophenyl)-N-[(1S,2R)-3-[(1,3-benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (29c). 1H NMR (400 MHz, $CDCl_3$) δ 7.37 (dd, $J = 8.4, 2.0$ Hz, 1H), 7.20 (d, $J = 2.0$ Hz, 1H), 7.17–7.11 (m, 3H), 7.09–7.04 (m, 3H), 6.95 (t, $J = 7.2$ Hz, 1H), 6.90 (d, $J = 8.0$ Hz, 1H), 6.82 (d, $J = 9.6$ Hz, 1H), 6.55 (dd, $J = 7.6, 1.2$ Hz, 1H), 6.51 (dd, $J = 7.6, 1.6$ Hz, 1H), 6.09 (s, 2H), 4.75 (dd, $J = 10.0, 6.0$ Hz, 1H), 4.19 (m, 1H), 4.0 (t, $J = 10.0$ Hz, 1H), 3.93 (m, 1H), 3.72 (br s, 1H), 3.32 (dd, $J = 9.2, 6.4$ Hz, 1H), 3.19 (dd, $J = 15.2, 9.6$ Hz, 1H), 3.13 (dd, $J = 14.0, 4.4$ Hz, 1H), 3.03–2.96 (m, 2H), 2.83 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.72 (dd, $J = 13.6, 10.4$ Hz, 1H), 1.85 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.01, 153.07, 151.84, 148.63, 147.53, 138.49, 137.48, 131.49, 130.08, 129.54 (2C), 128.68 (2C), 126.82, 123.45, 111.75, 108.66, 108.33, 107.77, 105.42, 102.63, 72.54, 69.83, 59.23, 54.08, 53.64, 48.46, 35.85, 27.58, 20.40, 20.10; HRMS (ESI) m/z : calcd for $C_{31}H_{37}N_4O_8S$ $[M + H]^+$ 625.2332; found 625.2321.

(5S)-3-(3-Aminophenyl)-N-[(1S,2R)-3-[(6-benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (29d). 1H NMR (400 MHz, $CDCl_3$) δ 9.21 (s, 1H), 8.49 (d, $J = 2.0$ Hz, 1H), 8.27 (d, $J = 8.8$ Hz, 1H), 7.92 (dd, $J = 8.8, 1.6$ Hz, 1H), 7.17–7.12 (m, 3H), 7.09–7.04 (m, 3H), 6.96 (t, $J = 7.6$ Hz, 1H), 6.90 (d, $J = 9.6$ Hz, 1H), 6.55 (dd, $J = 8.0, 1.6$ Hz, 1H), 6.51 (dd, $J = 8.0, 2.0$ Hz, 1H), 4.73 (dd, $J = 10.0, 6.4$ Hz, 1H), 4.21 (m, 1H), 4.0 (t, $J = 9.6$ Hz, 2H), 3.85 (br s, 1H), 3.75 (br s, 1H), 3.32 (dd, $J = 9.6, 6.4$ Hz, 1H), 3.25 (dd, $J = 15.2, 9.2$ Hz, 1H), 3.14 (dd, $J = 14.0, 4.8$ Hz, 1H), 3.09–3.03 (m, 2H), 2.93 (dd, $J = 13.6, 6.8$ Hz, 1H), 2.73 (dd, $J = 13.6, 10.8$ Hz, 1H), 1.89 (m, 1H), 0.95 (d, $J = 6.4$ Hz, 3H), 0.91 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.07, 158.34, 155.87, 153.14, 147.55, 138.46, 137.47, 135.69, 134.66, 130.10, 129.53 (2C), 128.70 (2C), 126.85, 125.09, 124.72, 122.60, 111.81, 108.37, 105.48, 72.49, 69.87, 59.11,

53.99, 53.74, 48.47, 35.84, 27.55, 20.38, 20.12; HRMS (ESI) m/z : calcd for $C_{31}H_{36}N_5O_6S_2$ $[M + H]^+$ 638.2107; found 638.2098.

(5S)-3-[3-(Acetylamino)phenyl]-N-[(1S,2R)-2-hydroxy-3-[[4-(methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (30b). 1H NMR (400 MHz, $CDCl_3$) δ 7.87 (t, $J = 1.2$ Hz, 1H), 7.84 (s, 1H), 7.75–7.72 (m, 2H), 7.60 (dd, $J = 7.6, 1.6$ Hz, 1H), 7.34 (t, $J = 8.0$ Hz, 1H), 7.23 (d, $J = 10.0$ Hz, 1H), 7.13 (d, $J = 7.2$ Hz, 2H), 7.03–6.96 (m, 4H), 6.89 (t, $J = 7.2$ Hz, 1H), 6.84 (d, $J = 9.2$ Hz, 1H), 4.77 (dd, $J = 10.0, 6.8$ Hz, 1H), 4.22 (m, 1H), 4.13 (br s, 1H), 4.0 (t, $J = 9.6$ Hz, 1H), 3.86 (s, 3H), 3.26 (dd, $J = 9.6, 6.0$ Hz, 1H), 3.24–3.17 (m, 2H), 3.05 (dd, $J = 14.4, 2.6$ Hz, 1H), 2.99 (dd, $J = 13.6, 8.8$ Hz, 1H), 2.86–2.78 (m, 2H), 2.20 (s, 3H), 1.87 (m, 1H), 0.92 (d, $J = 6.8$ Hz, 3H), 0.89 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.03, 168.92, 163.36, 153.37, 139.27, 137.90, 137.81, 129.85, 129.77, 129.69, 129.61 (2C), 128.55 (2C), 126.74, 116.33, 114.66 (2C), 113.63, 109.92, 109.82, 72.66, 70.02, 69.94, 59.08, 55.86, 53.94, 53.75, 48.39, 36.02, 27.50, 20.41, 20.09; HRMS (ESI) m/z : calcd for $C_{33}H_{41}N_4O_8S$ $[M + H]^+$ 653.2645; found 653.2643.

(5S)-3-[3-(Acetylamino)phenyl]-N-[(1S,2R)-3-[(1,3-benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (30c). 1H NMR (400 MHz, $CDCl_3$) δ 7.87 (s, 1H), 7.67 (s, 1H), 7.55 (d, $J = 8.4$ Hz, 1H), 7.40–7.32 (m, 2H), 7.20 (d, $J = 1.2$ Hz, 1H), 7.13 (d, $J = 7.6$ Hz, 3H), 7.02 (t, $J = 7.6$ Hz, 2H), 6.92–6.80 (m, 3H), 6.08 (d, $J = 1.2$ Hz, 2H), 4.78 (dd, $J = 10.0, 6.4$ Hz, 1H), 4.21 (m, 1H), 4.02 (m, 3H), 3.30 (dd, $J = 9.6, 6.8$ Hz, 1H), 3.23–3.16 (m, 2H), 3.07–2.97 (m, 2H), 2.85 (dd, $J = 13.2, 6.8$ Hz, 1H), 2.79 (dd, $J = 13.6, 10.8$ Hz, 1H), 2.20 (s, 3H), 1.87 (m, 1H), 0.93 (d, $J = 6.8$ Hz, 3H), 0.90 (d, $J = 6.4$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 169.12, 169.01, 153.47, 151.81, 148.60, 139.29, 137.93, 137.90, 131.53, 129.89, 129.62 (2C), 128.53 (2C), 126.71, 123.38, 116.34, 113.63, 109.98, 108.66, 107.74, 102.63, 72.76,

70.06, 59.15, 53.98, 53.83, 48.49, 36.04, 27.46, 24.84, 20.40, 20.09; HRMS (ESI) m/z : calcd for $C_{33}H_{39}N_4O_9S$ $[M + H]^+$ 667.2438; found 667.2423.

(5S)-3-[3-(Acetylamino)phenyl]-N-[(1S,2R)-3-[(6-benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2-oxooxazolidine-5-carboxamide (30d). 1H NMR (400 MHz, $CDCl_3$) δ 9.20 (s, 1H), 8.49 (d, $J = 2.0$ Hz, 1H), 8.23 (d, $J = 8.8$ Hz, 1H), 7.95 (s, 1H), 7.91 (dd, $J = 8.8, 1.6$ Hz, 1H), 7.72 (s, 1H), 7.48 (d, $J = 7.2$ Hz, 1H), 7.35–7.26 (m, 2H), 7.14 (d, $J = 7.2$ Hz, 2H), 7.02 (t, $J = 7.6$ Hz, 2H), 6.90 (t, $J = 7.6$ Hz, 1H), 6.84 (d, $J = 8.0$ Hz, 1H), 4.76 (dd, $J = 9.6, 6.0$ Hz, 1H), 4.22 (m, 1H), 4.11 (m, 2H), 4.0 (t, $J = 10.0$ Hz, 1H), 3.31–3.15 (m, 4H), 3.05 (dd, $J = 13.2, 7.6$ Hz, 1H), 2.96 (dd, $J = 13.6, 7.2$ Hz, 1H), 2.83 (dd, $J = 14.0, 10.8$ Hz, 1H), 2.19 (s, 3H), 1.92 (m, 1H), 0.92 (d, $J = 6.8$ Hz, 3H), 0.90 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.97, 158.34, 155.83, 153.43, 139.14, 137.98, 137.81, 135.84, 134.63, 129.87, 129.61 (2C), 128.58 (2C), 126.75, 125.08, 124.66, 122.56, 116.25, 113.81, 110.08, 72.63, 70.02, 58.96, 53.89, 53.80, 48.48, 36.02, 27.44, 24.89, 20.36, 20.11; HRMS (ESI) m/z : calcd for $C_{33}H_{38}N_5O_7S_2$ $[M + H]^+$ 680.2213; found 680.2225.

N-[3-[(5S)-5-[[[(1S,2R)-2-Hydroxy-3-[[4-(methoxyphenyl)sulfonyl]](2-methylpropyl)amino]-1-(phenylmethyl)propyl]amino]carbonyl]-2-oxo-3-oxazolidinyl]phenyl-carbamic acid methyl ester (31b). 1H NMR (400 MHz, $CDCl_3$) δ 7.76–7.72 (m, 3H), 7.35–7.30 (m, 2H), 7.12 (dd, $J = 8.4, 1.2$ Hz, 2H), 7.03 (t, $J = 7.6$ Hz, 2H), 7.0–6.94 (m, 5H), 6.90 (dt, $J = 7.6, 1.2$ Hz, 1H), 4.76 (dd, $J = 10.0, 6.0$ Hz, 1H), 4.22 (m, 1H), 4.02 (t, $J = 9.6$ Hz, 1H), 3.97 (m, 1H), 3.87 (s, 3H), 3.84 (d, $J = 2.8$ Hz, 1H), 3.79 (s, 3H), 3.32 (dd, $J = 9.2, 6.4$ Hz, 1H), 3.20 (dd, $J = 15.6, 9.6$ Hz, 1H), 3.15 (dd, $J = 14.4, 5.2$ Hz, 1H), 3.03–2.97 (m, 2H), 2.83 (dd, $J = 14.0, 6.8$ Hz, 1H), 2.76 (dd, $J = 14.0, 10.8$ Hz, 1H), 1.86 (m, 1H), 0.93 (d, $J = 6.8$ Hz, 3H), 0.89 (d, $J = 6.8$ Hz, 3H); ^{13}C NMR (100 MHz, $CDCl_3$) δ 168.86, 163.34, 154.22, 153.16, 139.15, 138.18, 137.60, 129.95, 129.87, 129.75 (2C), 129.58 (2C), 128.61 (2C),

126.77, 114.64 (2C), 113.05, 108.77, 72.59, 69.94, 59.10, 55.89, 53.95, 53.61, 52.74, 48.35, 35.86, 27.53, 20.40, 20.11; HRMS (ESI) m/z : calcd for C₃₃H₄₁N₄O₉S [M + H]⁺ 669.2594; found 669.2607.

***N*-[3-[(5*S*)-5-[[[(1*S*,2*R*)-3-[(1,3-Benzodioxol-5-ylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]amino]carbonyl]-2-oxo-3-oxazolidinyl]phenyl-carbamic acid methyl ester 31c.** ¹H NMR (400 MHz, CDCl₃) δ 7.71 (t, J = 1.2 Hz, 1H), 7.36 (dd, J = 8.4, 1.6 Hz, 1H), 7.32 (t, J = 8.0 Hz, 1H), 7.30–7.27 (m, 1H), 7.20 (d, J = 1.6 Hz, 1H), 7.13 (d, J = 7.6 Hz, 2H), 7.04 (t, J = 7.6 Hz, 2H), 6.99 (dd, J = 8.0, 1.2 Hz, 1H), 6.09 (s, 2H), 4.77 (dd, J = 10.0, 6.4 Hz, 1H), 4.21 (m, 1H), 4.03 (t, J = 10.0 Hz, 1H), 3.95 (br s, 1H), 3.80 (s, 3H), 3.75 (br s, 1H), 3.34 (dd, J = 9.2, 6.0 Hz, 1H), 3.23–3.12 (m, 2H), 3.04–2.97 (m, 2H), 2.84 (dd, J = 13.2, 6.8 Hz, 1H), 2.76 (dd, J = 13.6, 10.4 Hz, 1H), 1.86 (m, 1H), 0.95 (d, J = 6.4 Hz, 3H), 0.89 (d, J = 6.4 Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 169.01, 154.35, 153.37, 151.76, 148.57, 139.25, 138.15, 137.86, 131.59, 129.90, 129.62 (2C), 128.55 (2C), 126.69, 123.40, 114.91, 112.94, 108.94, 108.63, 107.78, 102.61, 72.74, 70.0, 59.11, 53.96, 53.75, 52.71, 48.47, 35.93, 27.46, 20.38, 20.12; HRMS (ESI) m/z : calcd for C₃₃H₃₉N₄O₁₀S [M + H]⁺ 683.2387; found 683.2399.

***N*-[3-[(5*S*)-5-[[[(1*S*,2*R*)-3-[(6-Benzothiazolylsulfonyl)(2-methylpropyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]amino]carbonyl]-2-oxo-3-oxazolidinyl]phenyl-carbamic acid methyl ester 31d.** ¹H NMR (400 MHz, CDCl₃) δ 9.21 (s, 1H), 8.49 (d, J = 1.6 Hz, 1H), 8.25 (d, J = 8.8 Hz, 1H), 7.91 (dd, J = 8.8, 2.0 Hz, 1H), 7.76 (t, J = 1.6 Hz, 1H), 7.34–7.26 (m, 2H), 7.13 (d, J = 7.2 Hz, 2H), 7.06–6.89 (m, 6H), 4.76 (dd, J = 10.0, 6.0 Hz, 1H), 4.23 (m, 1H), 4.03 (t, J = 10.0 Hz, 2H), 3.82 (br s, 1H), 3.79 (s, 3H), 3.34 (dd, J = 9.2, 6.0 Hz, 1H), 3.25 (dd, J = 15.6, 9.2 Hz, 1H), 3.19–3.10 (m, 2H), 3.05 (dd, J = 13.6, 8.0 Hz, 1H), 2.94 (dd, J = 13.6, 7.2 Hz, 1H), 2.79 (dd, J = 13.6, 10.8 Hz, 1H), 1.90 (m, 1H), 0.94 (d, J = 6.8 Hz, 3H), 0.90 (d, J = 6.4 Hz, 3H); ¹³C NMR (100 MHz, CDCl₃) δ 168.94, 158.31, 155.85, 154.23, 153.21, 139.12, 138.18, 137.57, 135.78, 134.63, 129.94, 129.57 (2C), 128.65 (2C), 126.82, 125.08, 124.69, 122.58, 114.88, 113.11, 108.87, 72.60, 69.94, 59.04, 53.89, 53.75, 52.73,

48.45, 35.88, 27.51, 20.36, 20.12; HRMS (ESI) m/z : calcd for $C_{33}H_{38}N_5O_8S_2$ $[M + H]^+$ 696.2162; found 696.2158.

Purity of Target Compounds Determined by HPLC Using Two Different Systems

Compound	First System (A)		Second System (B)	
	R _t (min)	Purity (%)	R _t (min)	Purity (%)
15c	6.81	100.0	7.73	100.0
15d	6.36	100.0	7.49	99.45
15e	5.27	99.05	5.96	98.65
17a	4.72	96.54	4.97	95.51
17b	5.79	98.63	6.37	98.44
17c	5.66	99.55	6.15	98.89
18a	6.04	98.08	6.71	99.47
18b	7.15	97.53	8.22	96.85
18c	7.01	97.36	7.96	96.56
18d	6.58	97.84	7.72	96.40
18e	5.52	98.61	6.25	98.63
19a	5.77	99.79	6.34	99.46
19b	6.86	100.0	7.82	100.0
19c	6.72	99.42	7.58	99.09
19d	6.28	98.95	7.32	98.50
19e	5.23	97.57	5.87	97.60
20a	5.96	96.14	6.55	97.16
20b	7.07	100.0	8.03	99.15
20c	6.91	100.0	7.79	99.69
20d	6.47	99.56	7.56	99.06
20e	5.40	98.50	6.07	97.75
21d	5.68	99.64	6.66	98.65
21e	4.85	99.23	5.57	99.04
22d	6.73	96.14	7.83	96.69
22e	5.63	96.77	6.32	96.56
23d	6.89	98.05	8.01	97.64
23e	5.81	98.77	6.50	96.74
24d	7.53	97.79	8.77	97.72
24e	6.44	98.88	7.27	96.18
25a	7.20	100.0	8.03	98.78
25b	8.27	99.83	9.46	99.61

25c	8.13	100.0	9.21	99.57
25d	7.78	100.0	9.11	99.52
25e	6.67	100.0	7.59	98.27
26d	5.83	98.97	6.84	97.14
26e	4.78	98.84	5.37	97.80
27b	5.64	100.0	6.40	98.97
27c	5.53	99.24	6.19	98.0
27d	5.08	98.52	5.84	97.47
28b	7.06	99.48	7.97	99.34
28c	6.93	99.44	7.74	98.19
28d	6.52	96.73	7.53	95.78
29b	5.61	99.29	6.41	99.34
29c	5.50	100.0	6.19	99.88
29d	5.01	99.02	5.85	98.47
30b	5.22	98.44	5.98	96.94
30c	5.10	99.32	5.78	99.44
30d	4.62	95.92	5.42	99.36
31b	6.24	98.74	6.91	97.66
31c	6.13	100.0	6.70	99.47
31d	5.66	100.0	6.38	99.39