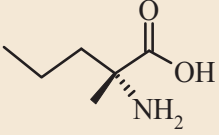
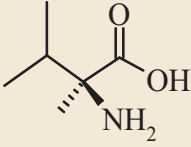
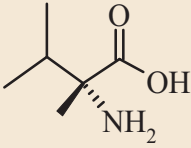
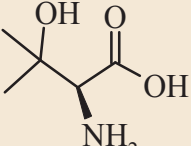
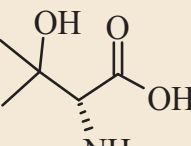
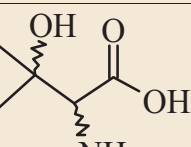
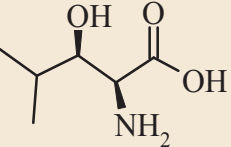


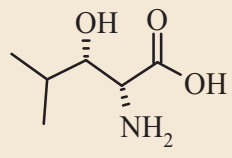
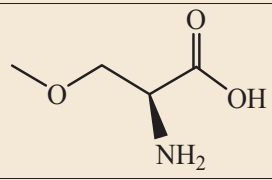
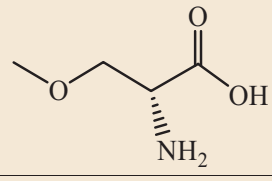
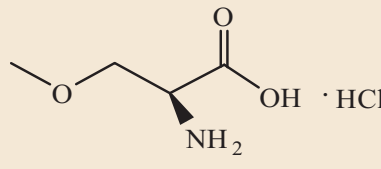
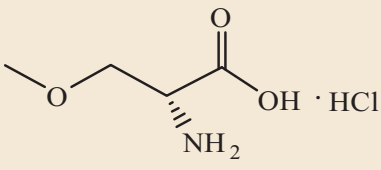
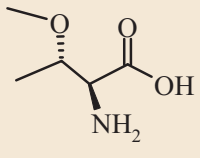
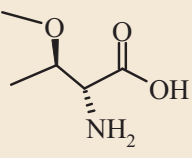
NONPROTEIN AMINO ACIDS

Product Number	Structure	Product Name & Specification
NPAA-01		(S)-(-)-2-Amino-4-pentenoic acid L-ALLYLGLYCINE C ₅ H ₉ NO ₂ FW 115.13 Mp 253-255 °C (dec.) [α] _D ²⁰ = -38.17° (c=4.0; H ₂ O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-02		(R)-(+)-2-Amino-4-pentenoic acid D-ALLYLGLYCINE C ₅ H ₉ NO ₂ FW 115.13 Mp 253-255 °C (dec.) [α] _D ²⁰ = +38.17° (c=4.0; H ₂ O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-03		(S)-(-)-2-Amino-2-methyl-4-pentenoic acid L-α-ALLYLALANINE C ₆ H ₁₁ NO ₂ FW 129.16 Mp 230-233 °C (dec.) [α] _D ²⁰ = -14.4° (c=1.3; 1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-04		(R)-(+)-2-Amino-2-methyl-4-pentenoic acid D-α-ALLYLALANINE C ₆ H ₁₁ NO ₂ FW 129.16 Mp 230-233 °C (dec.) [α] _D ²⁰ = +14.4° (c=1.3; 1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-05		(S)-(+)-2-Amino-2-methylbutanoic acid, monohydrate L-ISOVALINE, MONOHYDRATE C ₅ H ₁₁ NO ₂ · H ₂ O FW 135.16 Mp 293-295 °C (dec.) [α] _D ²⁰ = +9.55° (c=5.0; H ₂ O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-06		(R)-(-)-2-Amino-2-methylbutanoic acid, monohydrate D-ISOVALINE, MONOHYDRATE C ₅ H ₁₁ NO ₂ · H ₂ O FW 135.16 Mp 293-295 °C (dec.) [α] _D ²⁰ = -9.55° (c=5.0; H ₂ O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-07		(S)-(+)-2-amino-2-methylpentanoic acid L-α-PROPYLALANINE C ₆ H ₁₃ NO ₂ FW 131.18 Mp 231-233 °C [α] _D ²⁰ = +19.75° (c=1.0; H ₂ O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)

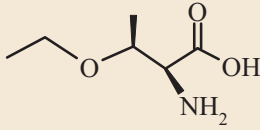
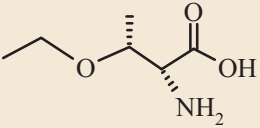
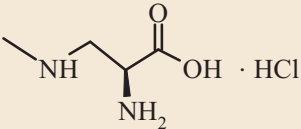
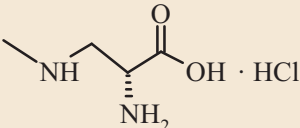
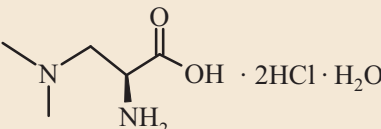
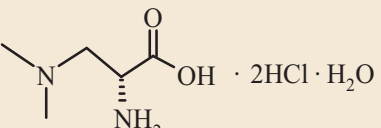
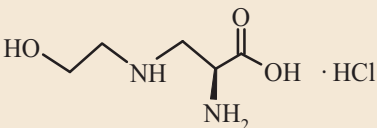
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NPAA-08		(R)-(-)-2-amino-2-methylpentanoic acid D-α-PROPYLALANINE C ₆ H ₁₃ NO ₂ FW 131.18 Mp 231-233 °C [α] ₅₇₈ ²⁰ = - 19.75° (c = 1.0; H ₂ O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)
NPAA-09		(S)-(-)-2-amino-2,3-dimethylbutanoic acid L-α-ISOPROPYLALANINE C ₆ H ₁₃ NO ₂ FW 131.18 Mp 232-234 °C [α] ₅₇₈ ²⁰ = -1.15° (c = 0.91; H ₂ O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98.5% (GLC, HPLC)
NPAA-10		(R)-(+)-2-amino-2,3-dimethylbutanoic acid] D-α-ISOPROPYLALANINE C ₆ H ₁₃ NO ₂ FW 131.18 Mp 232-234°C [α] ₅₇₈ ²⁰ = +1.15° (c = 0.91; H ₂ O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98.5% (GLC, HPLC)
NPAA-11		(S)-(+)-2-Amino-3-hydroxy-3-methylbutanoic acid L-HYDROXYVALINE C ₅ H ₁₁ NO ₃ FW 133.15 Mp 201-203 °C [α] _D ²⁰ = + 11.1° (c=0.64; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98.5% (GLC, HPLC)
NPAA-12		(R)-(-)-2-Amino-3-hydroxy-3-methylbutanoic acid D-HYDROXYVALINE C ₅ H ₁₁ NO ₃ FW 133.15 Mp 201-203 °C [α] _D ²⁰ = - 11.1° (c=0.64; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98.5% (GLC, HPLC)
NPAA-13		(R,S)-2-Amino-3-hydroxy-3-methylbutanoic acid D,L-HYDROXYVALINE C ₅ H ₁₁ NO ₃ FW 133.15 Mp 201-203°C [α] _D ²⁰ Not applicable Chemical purity > 98% (TLC, NMR)
NPAA-14		(2S,3R)-(+)-2-Amino-3-hydroxy-4-methylpentanoic acid L-β-HYDROXYLEUCINE C ₆ H ₁₃ NO ₃ FW 147.17 Mp 205-208°C (dec.) [α] _D ²⁰ = +19.15° (c=2.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)

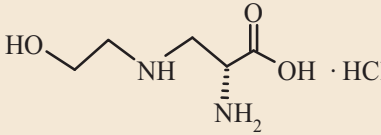
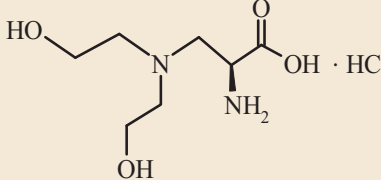
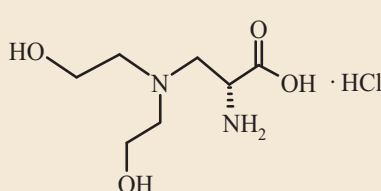
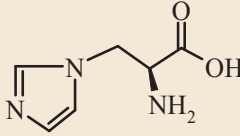
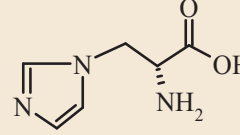
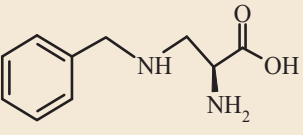
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NPAA-15		(2R,3S)-(-)-2-Amino-3-hydroxy-4-methylpentanoic acid D-β-HYDROXYLEUCINE C ₆ H ₁₃ NO ₃ FW 147.17 Mp 205-208 °C (dec.) [α] _D ²⁰ = -19.15° (c=2.0; 6N HCl) Chemical purity >98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-16		(S)-(+)-2-Amino-3-methoxypropanoic acid L-O-METHYLSERINE C ₄ H ₉ NO ₃ FW 119.12 Mp 214-215 °C (dec.) [α] _D ²⁰ = +13.85° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)
NPAA-17		(R)-(-)-2-Amino-3-methoxypropanoic acid D-O-METHYLSERINE C ₄ H ₉ NO ₃ FW 119.12 Mp 214-215 °C (dec.) [α] _D ²⁰ = -13.85° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)
NPAA-18		(S)-(+)-2-Amino-3-methoxypropanoic acid, hydrochloride L-O-METHYLSERINE · HCl C ₄ H ₁₀ NO ₃ Cl FW 155.58 Mp 214-215 °C [α] _D ²⁰ = +10.4° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-19		(R)-(-)-2-Amino-3-methoxypropanoic acid, hydrochloride D-O-METHYLSERINE · HCl C ₄ H ₁₀ NO ₃ Cl FW 155.58 Mp 214-215 °C [α] _D ²⁰ = -10.4° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-20		(2S,3S)-(+)-2-Amino-3-methoxybutanoic acid L-allo-O-METHYLTHREONINE C ₅ H ₁₁ NO ₃ FW 133.15 Mp 230-233 °C (dec.) [α] _D ²⁰ = +26.6° (c=0.5; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)
NPAA-21		(2R,3R)-(-)-2-Amino-3-methoxybutanoic acid D-allo-O-METHYLTHREONINE C ₅ H ₁₁ NO ₃ FW 133.15 Mp 230-233 °C (dec.) [α] _D ²⁰ = -26.6° (c=0.5; 6N HCl) Chemical purity >98% (TLC, NMR) Enantiomeric purity >98% (HPLC)

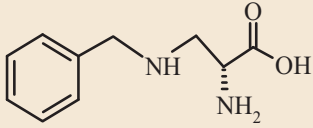
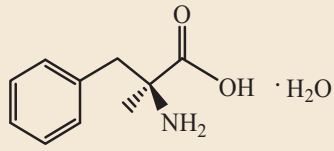
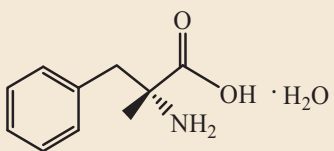
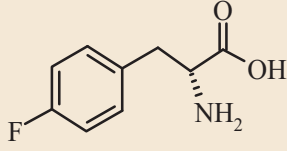
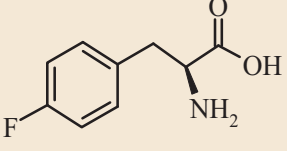
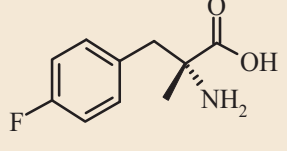
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NPAA-22		(2S,3S)-(+)-2-Amino-3-ethoxybutanoic acid L-<i>allo</i>-O-ETHYLTHREONINE C ₆ H ₁₃ NO ₃ FW 147.14 Mp 215-217 °C [α] _D ²⁰ = +22.4° (c=1.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-23		(2R,3R)-(-)-2-Amino-3-ethoxybutanoic acid D-<i>allo</i>-O-ETHYLTHREONINE C ₆ H ₁₃ NO ₃ FW 147.14 Mp 215-217 °C [α] _D ²⁰ = -22.4° (c=1.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)
NPAA-24		(S)-(+)-2-Amino-3-(methylamino)propanoic acid, hydrochloride L-β-(N-METHYLAMINO)ALANINE · HCl C ₄ H ₁₁ N ₂ O ₂ Cl FW 154.64 Mp 182-184 °C [α] _D ²⁰ = +26.2° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 86% (GLC)
NPAA-25		(R)-(-)-2-Amino-3-(methylamino)propanoic acid, hydrochloride D-β-(N-METHYLAMINO)ALANINE · HCl C ₄ H ₁₁ N ₂ O ₂ Cl FW 154.64 Mp 182-184 °C [α] _D ²⁰ = -26.20° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 86% (GLC)
NPAA-26		(S)-(+)-2-Amino-3-(dimethylamino)propanoic acid, dihydrochloride, monohydrate L-β-(N,N-DIMETHYLAMINO)ALANINE · 2HCl · H₂O C ₅ H ₁₃ N ₂ O ₃ Cl ₂ FW 223.10 Mp 143-145 °C [α] _D ²⁰ = +16.6° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 85% (GLC)
NPAA-27		(R)-(-)-2-Amino-3-(dimethylamino)propanoic acid, dihydrochloride, monohydrate D-β-(N,N-DIMETHYLAMINO)ALANINE · 2HCl · H₂O C ₅ H ₁₃ N ₂ O ₃ Cl ₂ FW 223.10 Mp 143-145 °C [α] _D ²⁰ = -16.6° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 85% (GLC)
NPAA-28		(S)-(-)-2-Amino-3-(ethanolamino)propanoic acid, hydrochloride L-β-(N-ETHANOLAMINO)ALANINE · HCl C ₅ H ₁₃ N ₂ O ₃ Cl FW 184.62 Mp 123-125 °C [α] _D ²⁰ = -19.08° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 86% (GLC)

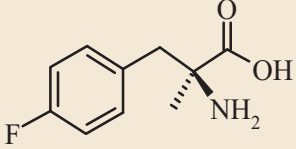
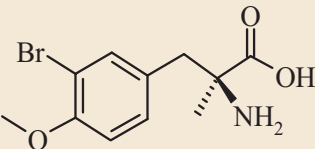
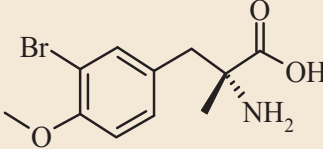
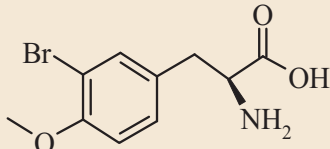
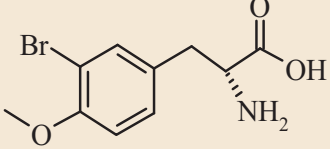
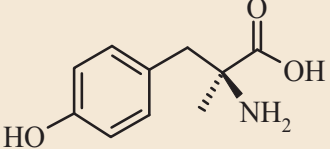
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NPAA-29		<p>(R)-(+)-2-Amino-3-(ethanolamino)propanoic acid, hydrochloride D-β-(N-ETHANOLAMINO)ALANINE · HCl $C_5H_{13}N_2O_3Cl$ FW 184.62 Mp 123-125 °C $[\alpha]_D^{20} = +19.08^\circ$ (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 86% (GLC)</p>
NPAA-30		<p>(S)-(+)-2-Amino-3-(diethanolamino)propanoic acid, hydrochloride L-β-(N,N-DIETHANOLAMINO)ALANINE · HCl $C_7H_{17}N_2O_4Cl$ FW 228.67 Mp 145-147 °C $[\alpha]_D^{20} = +28.79^\circ$ (c=1.0; 6N HCl) Chemical purity >98% (TLC, NMR) Enantiomeric purity > 95% (GLC)</p>
NPAA-31		<p>(R)-(-)-2-Amino-3-(diethanolamino)propanoic acid, hydrochloride D-β-(N,N-DIETHANOLAMINO)ALANINE · HCl $C_7H_{17}N_2O_4Cl$ FW 228.67 Mp 145-147 °C $[\alpha]_D^{20} = -28.79^\circ$ (c=1.0; 6N HCl) Chemical purity >98% (TLC, NMR) Enantiomeric purity > 95% (GLC, HPLC)</p>
NPAA-32		<p>(S)-(-)-2-Amino-3-(imidazol-1-yl)propanoic acid L-β-IMIDAZOLYLALANINE $C_6H_9N_3O_2$ FW 155.13 Mp 178-180 °C $[\alpha]_D^{20} = -2.2^\circ$ (c=10.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98.5% (GLC, HPLC)</p>
NPAA-33		<p>(R)-(+)-2-Amino-3-(imidazol-1-yl)propanoic acid D-β-IMIDAZOLYLALANINE $C_6H_9N_3O_2$ FW 155.13 Mp 178-180 °C $[\alpha]_D^{20} = +2.2^\circ$ (c=10.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98.5% (GLC, HPLC)</p>
NPAA-34		<p>(S)-(+)-2-Amino-3-(benzylamino)propanoic acid L-β-(N-BENZYLAMINO)ALANINE $C_{10}H_{14}N_2O_2$ FW 194.21 Mp 192-194 °C $[\alpha]_D^{20} = +29.67^\circ$ (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>

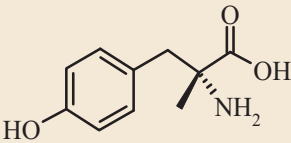
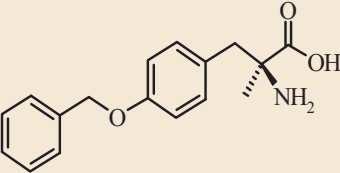
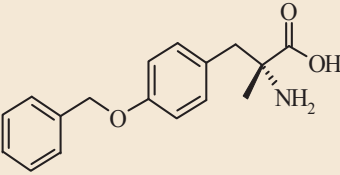
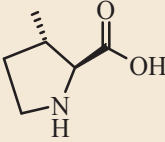
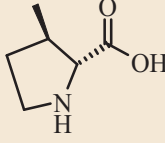
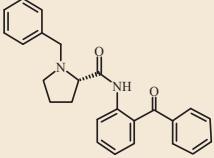
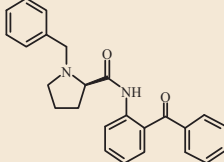
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NPAA-35		<p>(R)-(-)-2-Amino-3-(benzylamino)propanoic acid D-β-(N-BENZYLAMINO)ALANINE $C_{10}H_{14}N_2O_2$ FW 194.21 Mp 192-194 °C $[\alpha]_D^{20} = -29.67^\circ$ (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98 % (GLC, HPLC)</p>
NPAA-36		<p>(S)-(-)-2-amino-2-methyl-3-phenylpropanoic acid, monohydrate L-α-METHYLPHENYLALANINE, MONOHYDRATE $C_{10}H_{13}NO_2 \cdot H_2O$ FW 197.23 Mp 248-250 °C (dec.) $[\alpha]_D^{20} = -4.48^\circ$ (c=1.04; 1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)</p>
NPAA-37		<p>(R)-(+)-2-amino-2-methyl-3-phenylpropanoic acid, monohydrate D-α-METHYLPHENYLALANINE, MONOHYDRATE $C_{10}H_{13}NO_2 \cdot H_2O$ FW 197.23 $[\alpha]_D^{20} = +4.48^\circ$ (c=1.04; 1N HCl) Mp 248-250 °C (dec.) Chemical purity >98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)</p>
NPAA-38		<p>(S)-(-)-2-Amino-3-(4'-fluoro)phenylpropanoic acid L-4-F-PHENYLALANINE $C_9H_{10}NO_2F$ FW 189.23 Mp 252-255 °C $[\alpha]_D^{20} = -26.9^\circ$ (c=0.03; H₂O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>
NPAA-39		<p>(R)-(+)-2-Amino-3-(4'-fluoro)phenylpropanoic acid D-4-F-PHENYLALANINE $C_9H_{10}NO_2F$ FW 189.23 Mp 252-255 °C $[\alpha]_D^{20} = +26.9^\circ$ (c=0.03; H₂O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>
NPAA-40		<p>(S)-(-)-2-Amino-2-methyl-3-(4'-fluoro)phenylpropanoic acid L-4-F-α-METHYLPHENYLALANINE $C_{10}H_{12}NO_2F$ FW 197.21 Mp 300-303 °C $[\alpha]_D^{20} = -4.65^\circ$ (c = 0.5; 1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>

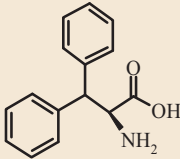
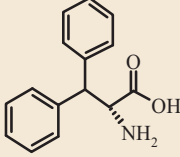
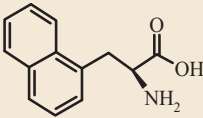
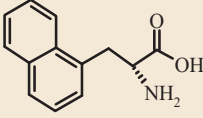
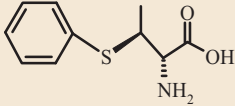
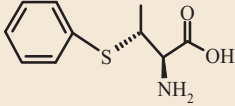
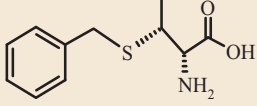
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NPAA-41		<p>(R)-(+)-2-Amino-2-methyl-3-(4'-fluoro)-phenylpropanoic acid D-4-F-α-METHYLPHENYLALANINE $C_{10}H_{12}NO_2F$ FW 197.21 Mp 300-303 °C $[\alpha]_D^{20} = +4.65^\circ$ (c = 0.5; 1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>
NPAA-42		<p>(S)-(-)-2-Amino-2-methyl-3-(3'-bromo-4'-methoxy)phenylpropanoic acid L-3-BROMO-4-METHOXY-α-METHYLPHENYLALANINE $C_{11}H_{14}NO_3Br$ FW 288.14 Mp 271-273 °C $[\alpha]_D^{20} = -5.7^\circ$ (c = 0.5; 1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>
NPAA-43		<p>(R)-(+)-2-Amino-2-methyl-3-(3'-bromo-4'-methoxy)phenylpropanoic acid D-3-BROMO-4-METHOXY-α-METHYLPHENYLALANINE $C_{11}H_{14}NO_3Br$ FW 288.14 Mp 271-273 °C $[\alpha]_D^{20} = +5.7^\circ$ (c = 0.5; 1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>
NPAA-44		<p>(S)-(-)-2-Amino-3-(3'-bromo-4'-methoxy)phenylpropanoic acid L-3-BROMO-4-METHOXYPHENYL-ALANINE $C_{10}H_{12}NO_3Br$ FW 274.12 Mp 247-249 °C $[\alpha]_D^{20} = -34.3^\circ$ (c = 0.3; H₂O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>
NPAA-45		<p>(R)-(+)-2-Amino-3-(3'-bromo-4'-methoxy)phenylpropanoic acid D-3-BROMO-4-METHOXYPHENYL-ALANINE $C_{10}H_{12}NO_3Br$ FW 274.12 Mp 247-249 °C $[\alpha]_D^{20} = +34.3^\circ$ (c = 0.3; H₂O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)</p>
NPAA-46		<p>(S)-(-)-2-Amino-2-methyl-3-(4'-hydroxy)-phenylpropanoic acid L-α-METHYLTYROSINE $C_{10}H_{13}NO_3$ FW 195.22 Mp 310-312 °C $[\alpha]_D^{20} = -6.93^\circ$ (c=1.0; 0,1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)</p>

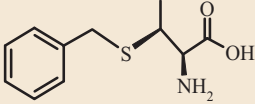
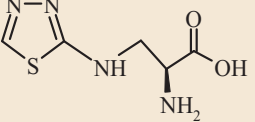
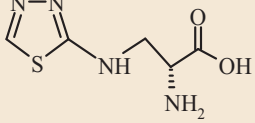
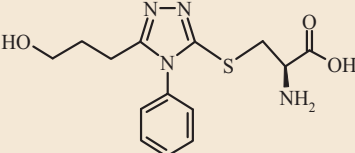
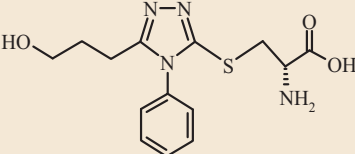
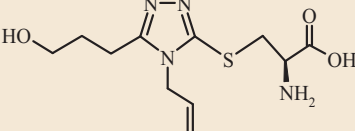
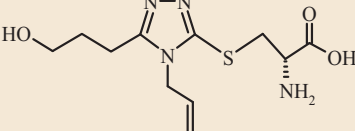
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NPAA-47		<p>(R)-(+)-2-Amino-2-methyl-3-(4'-hydroxy)phenylpropanoic acid D-α-METHYLTYROSINE $C_{10}H_{13}NO_3$ FW 195.22 Mp 310-312 °C $[\alpha]_D^{20} = +6.93^\circ$ (c=1.0; 0.1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)</p>
NPAA-48		<p>(S)-(-)-2-Amino-2-methyl-3-(4'-O-benzyloxy)phenylpropanoic acid L-O-BENZYL-α-METHYLTYROSINE $C_{17}H_{19}NO_3$ FW 285.35 Mp 280-282 °C (dec.) $[\alpha]_D^{20} = -6.92^\circ$ (c=2.1; CF₃COOH/H₂O=2/1) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC)</p>
NPAA-49		<p>(R)-(+)-2-Amino-2-methyl-3-(4'-O-benzyloxy)phenylpropanoic acid D-O-BENZYL-α-METHYLTYROSINE $C_{17}H_{19}NO_3$ FW 285.35 Mp 280-282 °C $[\alpha]_D^{20} = +6.92^\circ$ (c=2.1; CF₃COOH/ H₂O =2/1) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)</p>
NPAA-50		<p>(2S,3S)-(-)-3-Methylpyrrolidine-2-carboxylic acid L-trans-3-METHYLPROLINE $C_6H_{11}NO_2$ FW 129.16 Mp 245-247 °C (dec.) $[\alpha]_D^{20} = -27.2^\circ$ (c=0.7; H₂O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)</p>
NPAA-51		<p>(2R,3R)-(+)-3-Methylpyrrolidine-2-carboxylic acid D-trans-3-METHYLPROLINE $C_6H_{11}NO_2$ FW 129.16 Mp 245-247 °C (dec.) $[\alpha]_D^{20} = +27.2^\circ$ (c=0.7; H₂O) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99% (GLC, HPLC)</p>
NPAA-52		<p>(S)-(-)-2-N¹-(N-BENZYLPROLYL)-AMINOBENZOPHENONE $C_{23}H_{24}N_2O_2$ FW 384.48 Mp 101-102 °C (dec.) $[\alpha]_D^{20} = -134.5^\circ$ (c=1.0; MeOH) Chemical purity > 99% (TLC, NMR) Enantiomeric purity > 99% (HPLC)</p>
NPAA-53		<p>(R)-(+)-2-N¹-(N-BENZYLPROLYL)-AMINOBENZOPHENONE $C_{23}H_{24}N_2O_2$ FW 384.48 Mp 101-102 °C (dec.) $[\alpha]_D^{20} = +134.5^\circ$ (c=1.0; MeOH) Chemical purity > 99% (TLC, NMR) Enantiomeric purity > 99% (HPLC)</p>

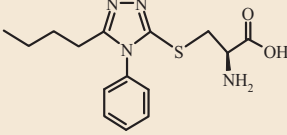
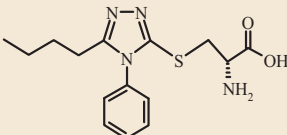
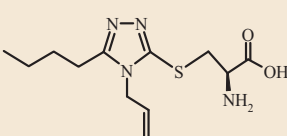
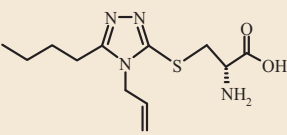
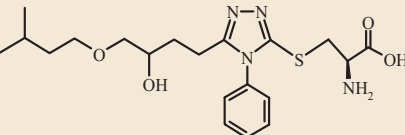
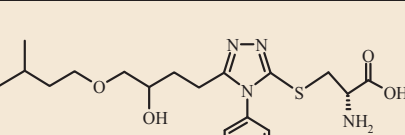
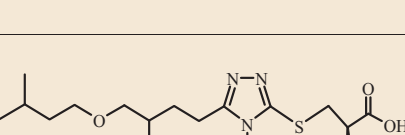
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NPAA-54		(S)-(+)-2-Amino-3,3-diphenylpropanoic acid L-β,β-DIPHENYLALANINE C ₁₅ H ₁₅ NO ₂ FW 241.29 Mp 238-240 °C (dec.) [α] _D ²⁰ = +63.3 ° (c=1.0; MeOH) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC, HPLC)
NPAA-55		(R)-(-)-2-Amino-3,3-diphenylpropanoic acid D-β,β-DIPHENYLALANINE C ₁₅ H ₁₅ NO ₂ FW 241.29 Mp 238-240 °C (dec.) [α] _D ²⁰ = -63.3 ° (c=1.0; MeOH) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (GLC)
NPAA-56		(S)-(-)-2-Amino-3-(1-naphthyl)propanoic acid L-β-(1-NAPHTHYL)ALANINE C ₁₃ H ₁₃ NO ₂ FW 215.25 Mp 256-258 °C [α] _D ²⁰ = -11.8 ° (c=0.5; HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98.5% (GLC, HPLC)
NPAA-57		(R)-(+)-2-Amino-3-(1-naphthyl)propanoic acid D-β-(1-NAPHTHYL)ALANINE C ₁₃ H ₁₃ NO ₂ FW 215.25 Mp 256-258 °C [α] _D ²⁰ = +11.8 ° (c=0.5; HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98.5% (GLC, HPLC)
NPAA-58		(2R,3S)-(-)-2-Amino-3-(phenylthio)butanoic acid L-allo-S-PHENYL-β-METHYLCYSTEINE C ₁₀ H ₁₃ NO ₂ S FW 211.28 Mp 175-176 °C [α] _D ²⁰ = -14.16° (c=0.48; 6N HCl/C ₂ H ₅ OH=12/1) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99 % (GLC, HPLC)
NPAA-59		(2S,3R)-(+)-2-Amino-3-(phenylthio)butanoic acid D-allo-S-PHENYL-β-METHYLCYSTEINE C ₁₀ H ₁₃ NO ₂ S FW 211.28 Mp 175-176 °C [α] _D ²⁰ = +14.16° (c=0.48; 6N HCl/C ₂ H ₅ OH=12/1) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99 % (GLC, HPLC)
NPAA-60		(2R,3S)-(-)-2-Amino-3-(benzylthio)butanoic acid L-allo-S-BENZYL-β-METHYLCYSTEINE C ₁₁ H ₁₅ NO ₂ S FW 225.31 Mp 174-176 °C [α] _D ²⁰ = -84.12° (c=0.23; 6N HCl/C ₂ H ₅ OH=2/1) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99 % (GLC, HPLC)

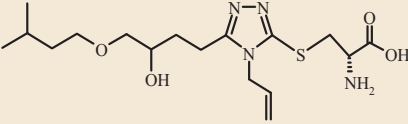
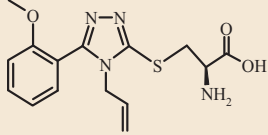
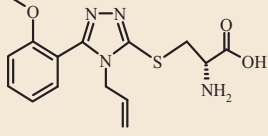
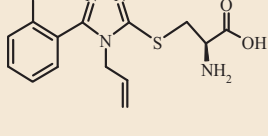
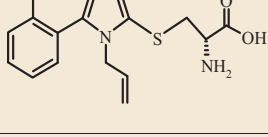
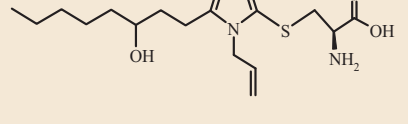
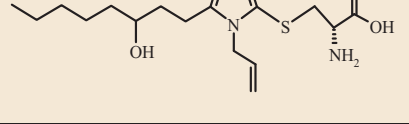
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NPAA-61		<p>(2<i>S</i>,3<i>R</i>)-(+)-2-Amino-3-(benzylthio)butanoic acid D-<i>allo</i>-S-BENZYL-β-METHYLCYSTEINE C₁₁H₁₅NO₂S FW 225.31 Mp 174-176 °C [α]_D²⁰ = +84.12° (c=0.23; 6N HCl/C₂H₅OH=2/1) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 99 % (GLC, HPLC)</p>
NPAA-62		<p>L-β-(2'-AMINO-1,2,4-THIODIAZOLYL)-α-ALANINE C₅H₈N₄O₂S FW 188.21 Mp 207-208 °C [α]_D²⁰ = +31.5° (c=1.0; 5.7N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-63		<p>D-β-(2'-AMINO-1,2,4-THIODIAZOLYL)-α-ALANINE C₅H₈N₄O₂S FW 188.21 Mp 207-208 °C [α]_D²⁰ = -31.5° (c=1.0; 5.7N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98 % (HPLC)</p>
NPAA-64		<p>L-S-5-(3'-HYDROXYPROPYL)-4-PHENYL-1,2,4-TRIAZOL-3-YL-CYSTEINE C₁₄H₁₈N₄O₃S FW 322.38 Mp 220-221 °C [α]_D²⁰ = -22.31° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-65		<p>D-S-5-(3'-HYDROXYPROPYL)-4-PHENYL-1,2,4-TRIAZOL-3-YL-CYSTEINE C₁₄H₁₈N₄O₃S FW 322.38 Mp 220-221 °C [α]_D²⁰ = +22.31° (c=1; 6N HCl) Chemical purity > 98% (TLC, NMR) Optical purity > 98 % (HPLC)</p>
NPAA-66		<p>L-S-5-(3'-HYDROXYPROPYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE C₁₁H₁₈N₄O₃S FW 286.35 Mp 195-196 °C [α]_D²⁰ = -5.47° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-67		<p>D-S-5-(3'-HYDROXYPROPYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE C₁₁H₁₈N₄O₃S FW 286.35 Mp 195-196°C [α]_D²⁰ = +5.47° (c=1.0; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>

NPAA

NPAA-68		<p>L-S-5-PROPYL-4-PHENYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{14}H_{18}N_4O_2S$ FW 306.38 Mp 213-216 °C $[\alpha]_D^{20} = -24.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-69		<p>D-S-5-PROPYL-4-PHENYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{14}H_{18}N_4O_2S$ FW 306.38 Mp 213-216 °C $[\alpha]_D^{20} = +24.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-70		<p>L-S-5-PROPYL-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{11}H_{18}N_4O_2S$ FW 270.35 Mp 190-192 °C $[\alpha]_D^{20} = -5.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-71		<p>D-S-5-PROPYL-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{11}H_{18}N_4O_2S$ FW 270.35 Mp 190-192 °C $[\alpha]_D^{20} = +5.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-72		<p>L-S-5-(3'-HYDROXY-4'-ISOAMYLOXY-BUTYL)-4-PHENYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{20}H_{30}N_4O_4S$ FW 422.54 Mp 163-165 °C $[\alpha]_D^{20} = -17.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-73		<p>D-S-5-(3'-HYDROXY-4'-ISOAMYLOXY-BUTYL)-4-PHENYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{20}H_{30}N_4O_4S$ FW 422.54 Mp 163-165 °C $[\alpha]_D^{20} = +17.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-74		<p>L-S-5-(3'-HYDROXY-4'-ISOAMYLOXY-BUTYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{17}H_{30}N_4O_4S$ FW 386.51 Mp 183-184 °C $[\alpha]_D^{20} = -4.5^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>

NPAA

NPAA-75		<p>D-S-5-(3'-HYDROXY-4'-ISOAMYLOXYBUTYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{17}H_{30}N_4O_3S$ FW 386.51 Mp 183-184 °C $[\alpha]_D^{20} = +4.5^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-76		<p>L-S-5-(2'-METHOXYPHENYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{15}H_{18}N_4O_3S$ FW 334.39 Mp 210-212 °C $[\alpha]_D^{20} = -5.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-77		<p>D-S-5-(2'-METHOXYPHENYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{15}H_{18}N_4O_3S$ FW 334.39 Mp 210-212 °C $[\alpha]_D^{20} = +5.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-78		<p>L-S-5-(2'-CHLOROPHENYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{14}H_{15}N_4O_2S$ FW 338.81 Mp 215-217 °C $[\alpha]_D^{20} = -2.0^\circ$ (c=0.5; 1N HCl) Chemical purity > 98% (TLC, NMR) Optical purity > 98% (HPLC)</p>
NPAA-79		<p>D-S-5-(2'-CHLOROPHENYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{14}H_{15}N_4O_2S$ FW 338.81 Mp 215-217 °C $[\alpha]_D^{20} = +2.0^\circ$ (c=0.5; 1N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-80		<p>L-S-5-(3'-HYDROXYOCTYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{16}H_{28}N_4O_3S$ FW 356.48 Mp 180-181 °C $[\alpha]_D^{20} = -4.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>
NPAA-81		<p>D-S-5-(3'-HYDROXYOCTYL)-4-ALLYL-1,2,4-TRIAZOL-3-YL-CYSTEINE $C_{16}H_{28}N_4O_3S$ FW 356.48 Mp 180-181 °C $[\alpha]_D^{20} = +4.0^\circ$ (c=0.1; 6N HCl) Chemical purity > 98% (TLC, NMR) Enantiomeric purity > 98% (HPLC)</p>