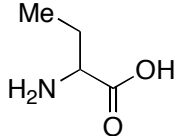
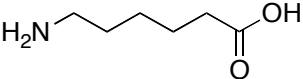
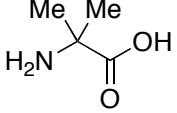
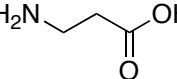
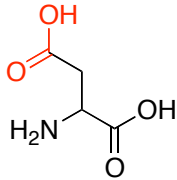
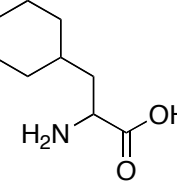
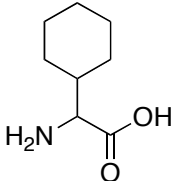
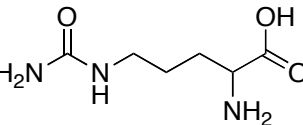
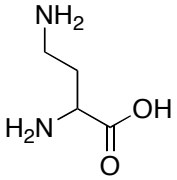
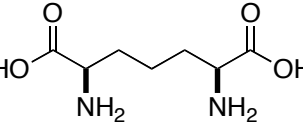
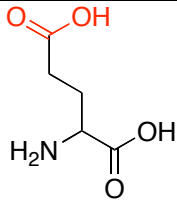
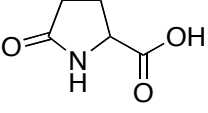
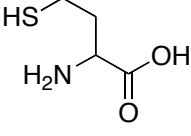
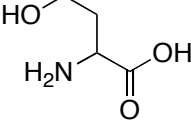
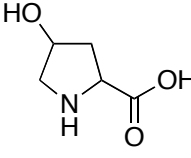
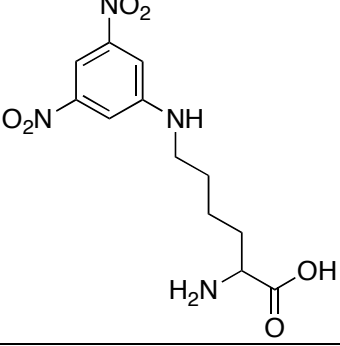
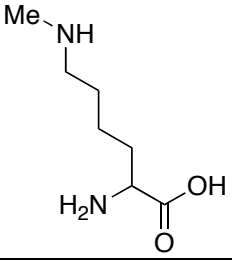
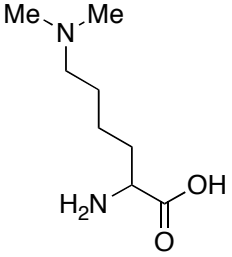


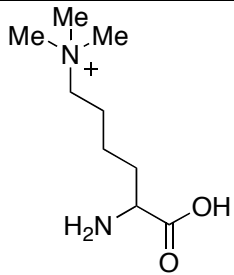
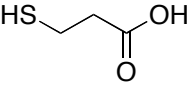
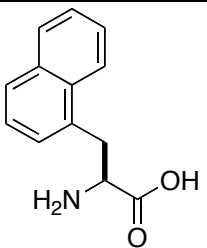
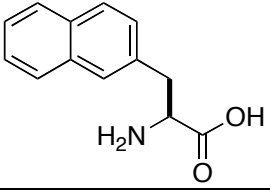
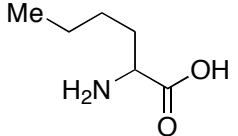
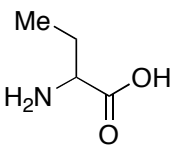
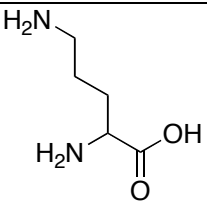
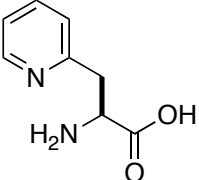
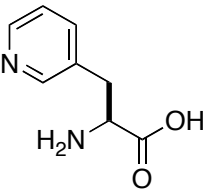
# Special Amino Acid Abbreviations

Symbol	Name	Structure	Formula	M.W.
Abu	2-Aminobutyric Acid		C <sub>4</sub> H <sub>9</sub> NO <sub>2</sub>	103.12
Ahx	6-Aminohexanoic Acid (6-Aminocaproic Acid)		C <sub>6</sub> H <sub>13</sub> NO <sub>2</sub>	131.18
Aib	α-Aminoisobutyric Acid		C <sub>4</sub> H <sub>9</sub> NO <sub>2</sub>	103.12
β-Ala	β-Alanine		C <sub>3</sub> H <sub>7</sub> NO <sub>2</sub>	89.10
β-Asp	β-Aspartic Acid		C <sub>4</sub> H <sub>7</sub> NO <sub>4</sub>	133.10
Cha	β-Cyclohexylalanine		C <sub>9</sub> H <sub>17</sub> NO <sub>2</sub>	171.24
Chg	α-Cyclohexylglycine		C <sub>8</sub> H <sub>15</sub> NO <sub>2</sub>	157.21
Cit	Citrulline		C <sub>6</sub> H <sub>13</sub> N <sub>3</sub> O <sub>3</sub>	175.19
Dab	Diaminobutyric acid		C <sub>4</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub>	118.13
Dap	Diaminopimelic acid		C <sub>7</sub> H <sub>14</sub> N <sub>2</sub> O <sub>4</sub>	190.10

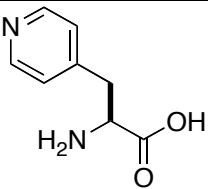
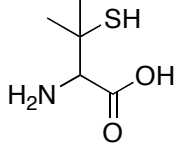
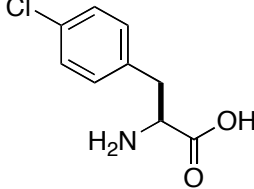
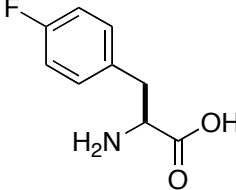
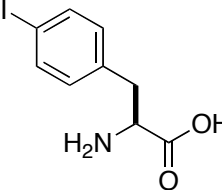
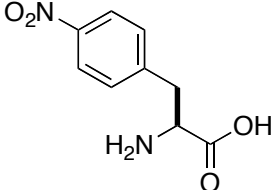
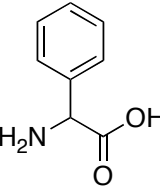
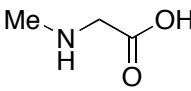
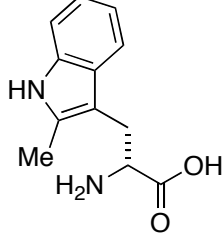
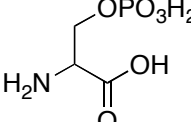
# Special Amino Acid Abbreviations

$\gamma$ -Glu	$\gamma$ -Glutamic Acid		$C_5H_9NO_4$	137.13
pGlu	Pyroglutamic acid		$C_5H_7NO_3$	129.11
Hcy	Homocysteine		$C_4H_9NO_2S$	135.18
Hse	Homoserine		$C_4H_9NO_3$	119.12
Hyp	Hydroxyproline		$C_5H_9NO_3$	131.13
Lys(Dnp)	N- $\epsilon$ -Dinitrophenyl-lysine		$C_{12}H_{16}N_4O_6$	312.28
Lys(Me)	N- $\epsilon$ -Methyl-lysine		$C_7H_{16}N_2O_2$	160.21
Lys(Me <sub>2</sub> )	N,N- $\epsilon$ -Dimethyl-lysine		$C_8H_{18}N_2O_2$	174.24

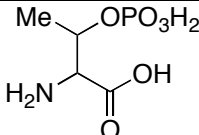
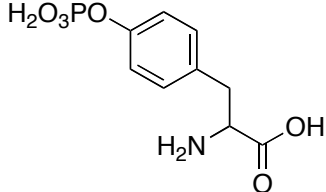
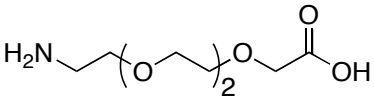
# Special Amino Acid Abbreviations

Lys(Me <sub>3</sub> )	N,N,N-ε-Trimethyl-lysine		C <sub>9</sub> H <sub>21</sub> N <sub>2</sub> O <sub>2</sub> <sup>+</sup>	189.27
Mpa	3-Mercaptopropionic acid		C <sub>3</sub> H <sub>6</sub> O <sub>2</sub> S	106.14
L-1-Nal	L-1-Naphthylalanine		C <sub>13</sub> H <sub>13</sub> NO <sub>2</sub>	215.25
L-2-Nal	L-2-Naphthylalanine		C <sub>13</sub> H <sub>13</sub> NO <sub>2</sub>	215.25
Nle	Norleucine		C <sub>6</sub> H <sub>13</sub> NO <sub>2</sub>	131.17
Nva	Norvaline		C <sub>4</sub> H <sub>9</sub> NO <sub>2</sub>	103.12
Orn	Ornithine		C <sub>5</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub>	132.16
L-2-Pal	3-(2-Pyridyl)-L-alanine		C <sub>8</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub>	166.18
L-3-Pal	3-(3-Pyridyl)-L-alanine		C <sub>8</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub>	166.18

# Special Amino Acid Abbreviations

L-4-Pal	3-(4-Pyridyl)-L-alanine		$C_8H_{10}N_2O_2$	166.18
Pen	Penicillamine		$C_5H_{11}NO_2S$	149.21
L-4-Cl-Phe	4-Chlorophenyl-L-alanine		$C_9H_{10}ClNO_2$	199.63
L-4-F-Phe	4-Fluorophenyl-L-alanine		$C_9H_{10}FNO_2$	183.17
L-4-I-Phe	4-Iodophenyl-L-alanine		$C_9H_{10}INO_2$	291.09
L-4-NO <sub>2</sub> -Phe	4-Nitrophenyl-L-alanine		$C_9H_{10}N_2O_4$	210.19
Phg	Phenylglycine		$C_8H_9NO_2$	151.16
Sar	Sarcosine		$C_3H_7NO_2$	89.09
D-2-Me-Trp	D-2-Methyl-tryptophan		$C_{12}H_{14}N_2O_2$	218.25
pSer	Phospho-serine		$C_3H_8NO_6P$	185.07

# Special Amino Acid Abbreviations

pThr	Phospho-threonine		C <sub>4</sub> H <sub>10</sub> NO <sub>6</sub> P	199.10
pTyr	Phospho-tyrosine		C <sub>9</sub> H <sub>12</sub> NO <sub>6</sub> P	261.17
mini-PEG	11-Amino-3,6,9-trioxaundecanoic acid		C <sub>8</sub> H <sub>17</sub> NO <sub>5</sub>	207.22