

<i>Amino Acid</i>	<i>3-Letter Abbr.</i>	<i>1-Letter Abbr</i>	<i>Structure</i>
Glycine	Gly	G	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{H}  \end{array}  $
Alanine	Ala	A	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH}_3  \end{array}  $
Valine	Val	V	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH} \\  / \quad \backslash \\  \text{H}_3\text{C} \quad \text{CH}_3  \end{array}  $
Leucine	Leu	L	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH}_2 \\    \\  \text{CH} \\  / \quad \backslash \\  \text{H}_3\text{C} \quad \text{CH}_3  \end{array}  $
Isoleucine	Ile	I	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{H}-\text{C}-\text{CH}_3 \\    \\  \text{CH}_2 \\    \\  \text{CH}_3  \end{array}  $
Proline	Pro	P	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_2\text{N}-\text{C}-\text{H} \\    \quad   \\  \text{H}_2\text{C} \quad \text{CH}_2 \\  \backslash \quad / \\  \text{CH}_2  \end{array}  $
Phenylalanine	Phe	F	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH}_2 \\    \\  \text{C}_6\text{H}_5  \end{array}  $
Tyrosine	Tyr	Y	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH}_2 \\    \\  \text{C}_6\text{H}_4 \\    \\  \text{OH}  \end{array}  $

Tryptophan	Trp	W	
Cysteine	Cys	C	
Methionine	Met	M	
Serine	Ser	S	
Threonine	Thr	T	
Lysine	Lys	K	
Arginine	Arg	R	
Histidine	His	H	

Aspartate	Asp	D	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH}_2 \\    \\  \text{C} \\  // \quad \backslash \\  \text{O} \quad \text{O}^-  \end{array}  $
Glutamate	Glu	E	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH}_2 \\    \\  \text{CH}_2 \\    \\  \text{C} \\  // \quad \backslash \\  \text{O} \quad \text{O}^-  \end{array}  $
Asparagine	Asn	N	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH}_2 \\    \\  \text{C} \\  // \quad \backslash \\  \text{O} \quad \text{NH}_2  \end{array}  $
Glutamine	Gln	Q	$  \begin{array}{c}  \text{COO}^- \\    \\  {}^+\text{H}_3\text{N}-\text{C}-\text{H} \\    \\  \text{CH}_2 \\    \\  \text{CH}_2 \\    \\  \text{C} \\  // \quad \backslash \\  \text{O} \quad \text{NH}_2  \end{array}  $