

$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ (\text{CH}_2)_3 \\ \\ \text{NH} \\ \\ \text{C}=\text{NH}_2 \\ \\ \text{NH}_2 \end{array}$ <p>Arginine (Arg / R)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{CH}_2 \\ \\ \text{C}=\text{O} \\ \\ \text{NH}_2 \end{array}$ <p>Glutamine (Gln / Q)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{C}_6\text{H}_5 \end{array}$ <p>Phenylalanine (Phe / F)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{C}_6\text{H}_4 \\ \\ \text{OH} \end{array}$ <p>Tyrosine (Tyr / Y)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{C}_8\text{H}_6\text{N}_2 \end{array}$ <p>Tryptophan (Trp, W)</p>
$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ (\text{CH}_2)_4 \\ \\ \text{NH}_2 \end{array}$ <p>Lysine (Lys / K)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{H} \end{array}$ <p>Glycine (Gly / G)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_3 \end{array}$ <p>Alanine (Ala / A)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{C}_4\text{H}_4\text{N}_2 \end{array}$ <p>Histidine (His / H)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{OH} \end{array}$ <p>Serine (Ser / S)</p>
$\begin{array}{c} \text{H}_2 \\ \\ \text{C} \\ / \quad \backslash \\ \text{H}_3\text{C} \quad \text{CH}_2 \\ \quad \diagup \quad \diagdown \\ \text{H}_2\text{N}^+ - \text{C} - \text{C} \\ \quad \quad \quad \diagup \quad \diagdown \\ \quad \quad \quad \text{O} \quad \text{O} \end{array}$ <p>Proline (Pro / P)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{CH}_2 \\ \\ \text{COOH} \end{array}$ <p>Glutamic Acid (Glu / E)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{COOH} \end{array}$ <p>Aspartic Acid (Asp / D)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{H} - \text{C} - \text{OH} \\ \\ \text{CH}_3 \end{array}$ <p>Threonine (Thr / T)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{SH} \end{array}$ <p>Cysteine (Cys / C)</p>
$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{CH}_2 \\ \\ \text{S} \\ \\ \text{CH}_3 \end{array}$ <p>Methionine (Met / M)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{CH} \\ / \quad \backslash \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$ <p>Leucine (Leu / L)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH}_2 \\ \\ \text{C}=\text{O} \\ \\ \text{NH}_2 \end{array}$ <p>Asparagine (Asn / N)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{HC} - \text{CH}_3 \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$ <p>Isoleucine (Ile / I)</p>	$\begin{array}{c} \text{H} \\ \\ \text{H}_3\text{N}^+ - \text{C} - \text{C} \\ \quad \diagup \quad \diagdown \\ \quad \text{O} \quad \text{O} \\ \text{CH} \\ / \quad \backslash \\ \text{CH}_3 \quad \text{CH}_3 \end{array}$ <p>Valine (Val / V)</p>