

Písmena ve 3. kolonce tabulky označují polaritu:  
N nepolární, P neutrální polární, K kyselá a Z zásaditá aminokyselina.

Písmena ve 4. kolonce tabulky (E, N) označují esenciálnost aminokyselin ve vztahu k člověku:  
E esenciální, N neesenciální.

| Název<br>(zkratka)        | Vzorec                                                                                                                                                                                      |   |   |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| <b>Glycin</b><br>Gly      | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{H} \\   \\ \text{NH}_3^+ \end{array}$                                                                                        | N | N |
| <b>Alanin</b><br>Ala      | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_3 \\   \\ \text{NH}_3^+ \end{array}$                                                                                     | N | N |
| <b>Valin</b><br>Val       | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{HC} \begin{array}{l} \nearrow \text{CH}_3 \\ \searrow \text{CH}_3 \end{array} \\   \\ \text{NH}_3^+ \end{array}$             | N | E |
| <b>Leucin</b><br>Leu      | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{HC} \begin{array}{l} \nearrow \text{CH}_3 \\ \searrow \text{CH}_3 \end{array} \\   \\ \text{NH}_3^+ \end{array}$ | N | E |
| <b>Isoleucin</b><br>Ile   | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{HC} \begin{array}{l} \nearrow \text{CH}_2-\text{CH}_3 \\ \searrow \text{CH}_3 \end{array} \\   \\ \text{NH}_3^+ \end{array}$ | N | E |
| <b>Prolin</b><br>Pro      | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2 \\   \quad \quad   \\ \text{H}_2\text{N}^+ \quad \text{CH}_2 \end{array}$                                              | N | N |
| <b>Fenylalanin</b><br>Phe | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{C}_6\text{H}_5 \\   \\ \text{NH}_3^+ \end{array}$                                                                | N | E |
| <b>Tyrosin</b><br>Tyr     | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{C}_6\text{H}_4-\text{OH} \\   \\ \text{NH}_3^+ \end{array}$                                                      | P | N |
| <b>Tryptofan</b><br>Trp   | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{C}_8\text{H}_6\text{N}_2 \\   \\ \text{NH}_3^+ \end{array}$                                                      | N | E |
| <b>Histidin</b><br>His    | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{C}_4\text{H}_3\text{N}_2^+ \\   \\ \text{NH}_3^+ \end{array}$                                                    | Z | N |

| Název<br>(zkratka)                | Vzorec                                                                                                                                                                                                                         |   |   |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| <b>Serin</b><br>Ser               | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{OH} \\   \\ \text{NH}_3^+ \end{array}$                                                                                                              | P | N |
| <b>Threonin</b><br>Thr            | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH} \begin{array}{l} \nearrow \text{CH}_3 \\ \searrow \text{OH} \end{array} \\   \\ \text{NH}_3^+ \end{array}$                                                  | P | E |
| <b>Cystein</b><br>Cys             | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{SH} \\   \\ \text{NH}_3^+ \end{array}$                                                                                                              | P | N |
| <b>Methionin</b><br>Met           | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{CH}_2-\text{S}-\text{CH}_3 \\   \\ \text{NH}_3^+ \end{array}$                                                                                       | N | E |
| <b>Lysin</b><br>Lys               | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{NH}_3^+ \\   \\ \text{NH}_3^+ \end{array}$                                                                      | Z | E |
| <b>Arginin</b><br>Arg             | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{NH}-\text{C} \begin{array}{l} \nearrow \text{NH}_2^+ \\ \searrow \text{NH}_2 \end{array} \\   \\ \text{NH}_3^+ \end{array}$ | Z | N |
| <b>Asparagová kyselina</b><br>Asp | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{COO}^- \\   \\ \text{NH}_3^+ \end{array}$                                                                                                           | K | N |
| <b>Glutamová kyselina</b><br>Glu  | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{CH}_2-\text{COO}^- \\   \\ \text{NH}_3^+ \end{array}$                                                                                               | K | N |
| <b>Asparagin</b><br>Asn           | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{CONH}_2 \\   \\ \text{NH}_3^+ \end{array}$                                                                                                          | P | N |
| <b>Glutamin</b><br>Gln            | $\begin{array}{c} \text{COO}^- \\   \\ \text{H}-\text{C}-\text{CH}_2-\text{CH}_2-\text{CONH}_2 \\   \\ \text{NH}_3^+ \end{array}$                                                                                              | P | N |