Natural Amino Acid

Hydrophobic or Aliphatic Amino Acids

- Alanine (Ala, A)
- Valine (Val, V)
- Leucine (Leu, L)
- Isoleucine (Ile, I)
- Phenylalanine (Phe, F)

Acidic Amino Acids

- Aspartic acid (Asp, D)
- Glutamic acid (Glu, E)

pKₐ values:
- Aspartic acid: 3.7
- Glutamic acid: 4.3

Basic Amino Acids

- Arginine (Arg, R)
- Lysine (Lys, K)
- Histidine (His, H)

pKₐ values:
- Arginine: 12.5
- Lysine: 10.5
- Histidine: 6.1

Polar/ Hydrogen bonding Amino Acids

- Serine (Ser, S)
- Threonine (Thr, T)
- Tyrosine (Tyr, Y)

- Asparagine (Asn, N)
- Glutamine (Gln, Q)
- Tryptophan (Try, W)

Sulfur containing Amino Acids

- Methionine (Met, M)
- Cysteine (Cys, C)

pKₐ values:
- Methionine: 8.3

Flexible/inflexible Amino Acids

- Glycine (Gly, G)
- Proline (Pro, P)

= Essential amino acid.