

Amino Acids

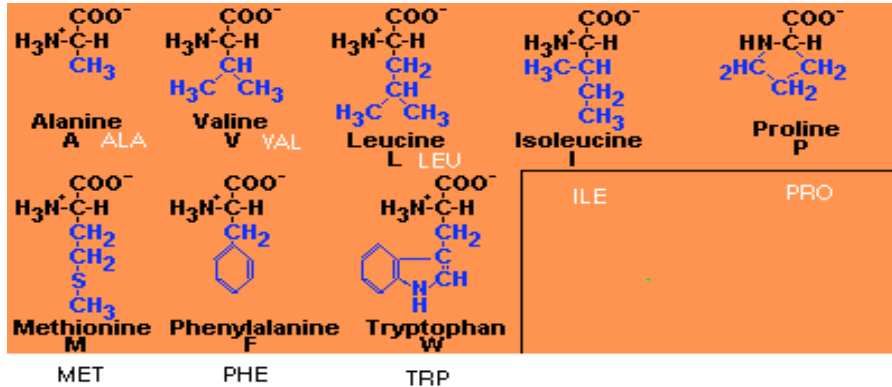
(Adapted from [University of Virginia Site](#))

Amended with information from

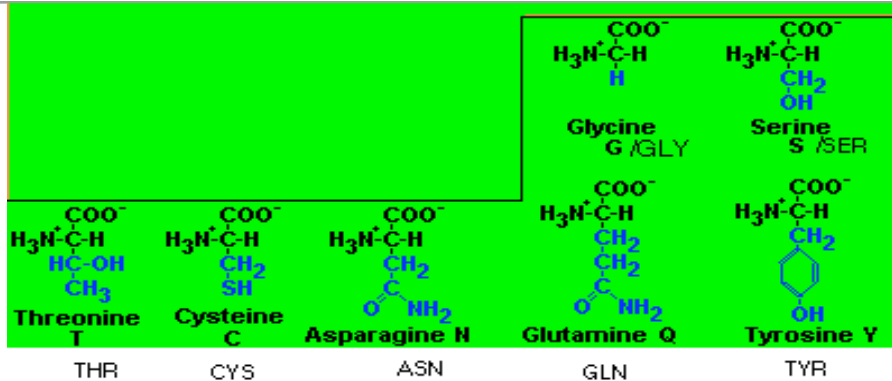
<http://www.russell.embl-heidelberg.de/aas/aas.html>

Each amino acid has an amino and carboxyl group, in black and a unique side chain, or radical, in blue/dark black.

NON-POLAR AMINO ACIDS. Their side chains have no charge and they do NOT react with water, so we call them "hydrophobic "or "water-fearing."

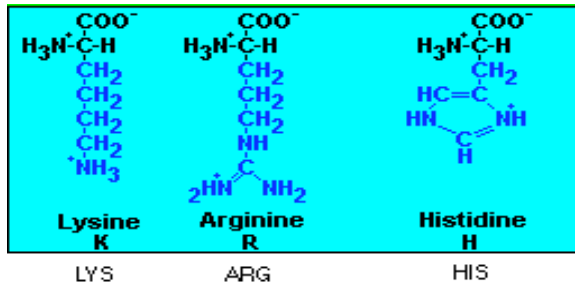


POLAR AMINO ACIDS. ALL the amino acids below have side chains that react to water. They are all "hydrophilic", or "water-loving".

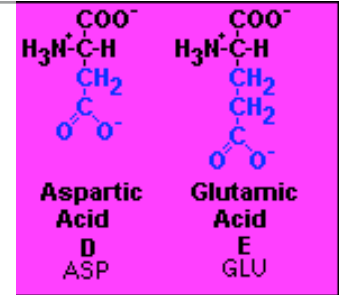


Polar but no net charge

Asparagine is quite polar, while the others are less polar or "indifferent."



These three amino acids are basic at the pH commonly found in living things.



These two amino acids are acidic* (as is clear in their name) at the pH commonly found in living things.