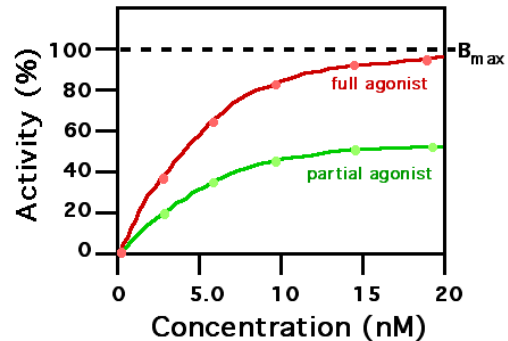


Some useful definitions:

-Agonist: a substance that binds to a specific receptor and triggers a response in the cell mimicking the action of the endogenous ligand for that receptor

-Partial Agonist: activates a receptor but only produces partial physiological response compared to a full agonist



-Antagonist: a substance that blocks a receptors functioning by blocking activation from exogenous or endogenous agonists

-Ligand: a small molecule that interacts with a large molecule known as a Receptor

-Substrate: a small molecule that interacts with a large molecule known as an Enzyme

-Phosphatase: a large protein (enzyme) that REMOVES a phosphate group from its substrate. Their activity is commonly dependent on the presence of Cysteine

-Kinase: (aka phosphorylase or phosphotransferase) a type of enzyme that transfers a phosphate group from a high-energy donor molecule (like ATP) to a specific substrate. This process is known as phosphorylation

-Essential vs. Non-Essential: something is essential when it cannot be synthesized de novo by the organism in question and, therefore, must be supplied in the diet. Nonessential molecules the body can make.

*Essential amino acids include:

1. Isoleucine
2. Leucine
3. Lysine
4. Threonine
5. Tryptophan
6. Methionine
7. Histidine
8. Valine
9. Phenylalanine

*Omega 3 Fatty Acids are an example of essential PolyUnsaturated Fatty Acids.

The Periodic Table of Amino Acids

