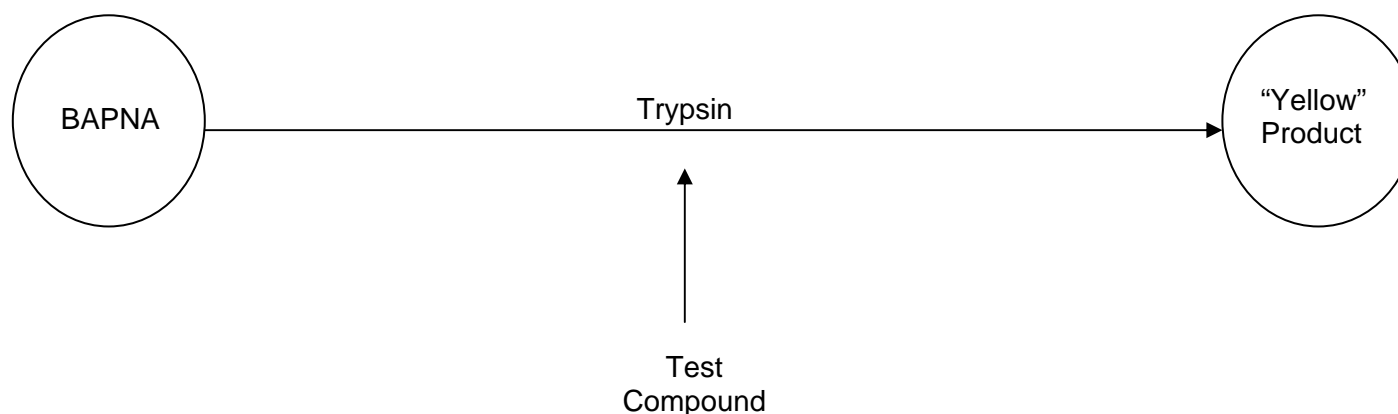


Trypsin Inhibition Test for Screening Compounds for Potential Drug Development



Notes on reaction:

Trypsin is the enzyme used in this reaction.

BAPNA is an enzyme substrate (it is a reagent in the reaction).

The "yellow" product is p-Nitroaniline.

The test compounds that CELISCA is currently studying are extracts from marine organism.

The test is intended to identify the level of Trypsin activity inhibition that occurs as a result of the presence of the compound.

If no sample compound is added to the reaction the conversion of BAPNA to "yellow product represents 100% trypsin activity.

If the Trypsin activity level does not exceed 60%, then the chemist says that a positive inhibitory effect of the compound has occurred (i.e., they've obtained a "hit").

The activity level is determined by measurement of absorption at a wavelength of 405 nm (appropriate for the yellow product) for each well on a test plate by using a specialized plate reader.

(Not represented in this simple model are the buffer used to maintain the PH at a particular level during the reaction and acetic acid, which is also added as a reagent at the end of the test. The acid stops the reaction.)