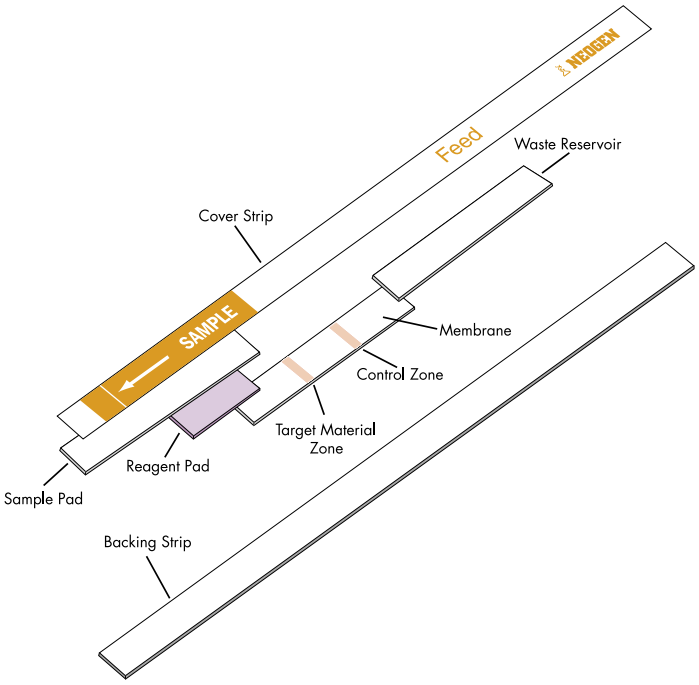
How Neogen's Test Kits Work

Lateral Flow Immunochromatic Assays

(All pathogen, allergen, mycotoxins, GMO and ruminant test kits in the lateral flow format)

First, a portion of enriched or extracted sample is placed into the device's sample port. The sample is then wicked through a reagent zone, which contains antibodies specific for the target substance conjugated to colored particles. If the target substance is present, it will bind to the particle conjugated antibodies.

The target substance-antibody-particle complex then leaves the reagent zone and travels through the membrane into the device's test zone. The test zone contains anti-target substance antibodies that capture the complex, and display a visible colored line. *(Note: For mycotoxins only, the presence of a predetermined level of target substance will result in no visible line in the test zone. With mycotoxins, the device's test zone captures colored particle-conjugated antibodies not carrying the target substance complex.)* The remainder of the sample continues to migrate to the end of the membrane where it is deposited into the waste reservoir.

The reagent zone also contains a control immune complex that is eluted by the sample solution regardless of the presence of the target substance. The control conjugate migrates through the membrane to the control zone where it forms a visible colored line. Regardless of the presence or absence of the target substance, the control line will form in the control zone to ensure the test is working properly.