Spike Recovery Procedure

The purpose of a spike recovery procedure is to determine whether or not a particular sample matrix has any kind of effect on ELISA analysis. It is essential to carry out spike recovery to ensure that the results obtained are neither inaccurate nor false.

In conjunction with the ELISA kit manufacturers, an extensive review of our sample spiking procedure has been undertaken. This is to ensure a high quality of service is provided.

We will validate all sample matrices which have not previously been validated by either the kit supplier or ourselves with the specified allergen. Any data collected from validation of these samples is stored on our company database for future reference.

Method Details

It is standard practice to ask a customer for a sample which is known not to contain the allergen in question, whenever a spike recovery may need to be carried out. This is to ensure that there is no other interference whilst carrying out the spike testing.

The test works by adding a known amount of the specific allergen to the control sample. This 'spiked' sample is then taken through the normal ELISA extraction and analysis procedure. The aim is to recover the equivalent concentration of the allergen that was originally added to the sample. The spike recovery, in most cases, can only pass if the recovery of the allergen is between 80–130%. Anything which falls outside of this range will mean the particular sample matrix is not suitable for the specific ELISA analysis as some interference has taken place, producing incorrect results. This would mean any results obtained would not be reported.

The charge for carrying out a spike recovery reflects only a fraction of the costs incurred to us through analyst time and extra materials used. The charge is priced at the cost of an additional sample. This charge will apply regardless of whether the spike recovery passes or fails.