

Sample types and buffer compatibility in MercoDIA's assays

To ensure reliable results when using sample types other than those recommended in the Directions for Use, a test to evaluate matrix compatibility can be performed following the protocol below.

A description of sample types and their preparation is stated in the Directions for Use. Please note that a buffer may work in one ELISA but not in another. Therefore, always check each ELISA individually.

Sample Buffer or Calibrator 0 as Sample Diluent

To ensure a proper reaction environment in MercoDIA's assays, use the provided Sample Buffer or Calibrator 0 to dilute serum/plasma samples, antigen extraction or antigen in culture medium. For example, an acid ethanol solution needs a hundred-fold dilution to achieve the proper buffer milieu.

Diabetes Sample Buffer (10-1195-01) is a supplement product that can be used for sample dilution in the following MercoDIA ELISAs:

- human insulins
- human proinsulin
- rat and mouse insulin
- rat/mouse proinsulin
- rat C-peptide
- animal insulin

Sample type/buffer compatibility testing

Sample formulations not stated in the Direction for Use should be tested for compatibility in the MercoDIA assay. The protocol below is a straightforward method to establish if a formulation/medium can be used in a particular assay.

1. Use the medium to be tested as a dilution buffer. Dilute the highest calibrator in a series, for example 1/2, 1/4, 1/8 etc.
2. Repeat the dilution series, this time using the kit Calibrator 0 (or Sample Buffer) as diluent.
3. Analyze both dilution series as samples in the assay.
4. Any interference of the medium will be displayed by comparing the measured results from dilution series (a) and (b). Using this protocol, it will not only be established if the medium is interfering with the assay, but also at what level it is causing the interference, if any.