

# Effect Diluent

## BUFFERS &amp; STABILIZERS

**Sample Diluent & RF/HAMA Blocker**

Low cat. no. 5070

Medium cat. no. 5080

High cat. no. 5090

Kit (all 3) cat. no. 5095

**Product Characteristics**

The Effect Diluent is an effective buffer for the dilution of serum, plasma, blood, stool or urine samples, as well as the dilution of primary and secondary antibodies. It efficiently minimizes cross-reactions and unspecific binding in immunoassays like ELISA, EIA, RIA, Western Blotting, Immuno-PCR, Protein arrays, multianalyte immunoassays and Immunohistochemistry.

The Effect Diluent is used alternatively to the standard sample or antibody dilution buffer:

- In ELISA for the dilution of specimen and detection antibodies.
- In Western Blotting for the dilution of primary and secondary antibodies.
- In IHC for the dilution of primary and secondary antibodies.
- In Protein arrays for the dilution of specimen and detection antibodies.

Three versions of the Effect Diluent are offered: Low, Medium and High for optimal discrimination between specific and unspecific reaction and for minimizing strong interference effects e.g. by RF (rheumatoid factors), HAMAs (human-a-mouse Abs) or by endogenous components that bind and mask the analyte.

**Composition & Properties**

The Effect Diluent buffers have pH-values of ~ 7.2 containing 0.0014% CMIT/MIT (3:1).

**Working Procedure**

1. Mix thoroughly prior to use.
2. Dilution recommendations
  - a. Dilute antibodies according to the instruction of the antibody
  - b. Dilution of the specimen is recommended at 1:2 or higher

**Tips & Tricks**

- Effect Diluents must not be considered as blocking buffers. Recommended blocking buffers are: Synthetic Blocking Buffer, ELISA (cat. no. 4520), Synthetic Blocking Buffer, Blotting (cat. no. 4650) and WellChampion (cat. no. 4900/4901) for plate blocking and stabilization (preparation of pre-coated plates).
- Complex sample matrices, such as serum and plasma, may contain interfering factors that affect the ability of the assay to accurately quantify the target analyte. Strong interferences are often caused by RFs and HAMAs. This matrix effect can cause high background in the negative control or false negatives in the sample measurement. To reduce this effect the samples can be diluted in Effect Diluent.

**Handling & Storage**

- Store solution at 2-8 °C.