

BlueCapSolutions LX-Buffer

***LX-Buffer* is not for use as a blocking solution for surfaces!**

Product description

pH-value:	pH 7.2 ± 0.2
Preservative:	contains < 0.0014 % [w/w] mixture of CMIT/MIT (3:1)
Storage:	shelf life at 2 – 8 °C: 24 months – when stored in an unopened bottle shelf life at 2 – 8 °C: 6 months – after bottle opening shelf life at –20 °C: 1 year – repeated freezing and thawing cycles possible

For in vitro research use only.

Available

Packaging sizes:	50 ml order number S201.050
	125 ml order number S201.125
	500 ml order number S201.500

Instructions for use

The newly developed *LX-Buffer* lowers cross reactivities, unspecific binding and matrix effects in immunoassays like ELISA, EIA, Western blotting, immuno-PCR, protein arrays, multianalyte immunoassays and immunohistochemistry – depending on the characteristics of the assay type and the used antibodies.

Immediately before use the buffer should be mixed thoroughly.

LX-Buffer is used instead of a sample buffer or antibody dilution buffer for the immunological reaction.

LX-Buffer is unsuitable for blocking of surfaces. For blocking of surfaces we recommend *Blocking Solution*. *LX-Buffer* is not useable as a sample buffer for electrophoresis.

Example of use:

ELISA: dilution buffer for specimen and for the detection antibodies

Western blotting: dilution buffer for primary and secondary antibodies

Immunohistochemistry: dilution buffer for primary and secondary antibodies

Protein arrays: dilution buffer for specimen and for the detection antibodies

Dilution of the specimen:

Standards and specimen for ELISA and protein arrays can be diluted with *LX-Buffer* at 1:2 or higher. Standards and specimen should be treated strictly the same way.

Dilution of antibodies:

Antibodies can be diluted with *LX-Buffer* in a user-defined manner, depending on the recommendation of the data sheet of the antibodies. This is the same for primary and secondary antibodies.

Appearance of signal reduction:

In some cases a smooth reduction of the wanted signal can be observed. *LX-Buffer* reduces low- and middle-affinity binding. That means that by the use of low- and middle-affinity antibodies or polyclonal antibodies a smooth reduction of signals can appear. Polyclonal antibodies normally contain low- and middle-affinity binding components.

In the case of polyclonal antibodies a moderate increase of the concentration of the antibody can lead to the previously seen signals. Unwanted low and middle-affinity binding will be still reduced by *LX-Buffer*.

In the case of low- and middle affinity antibodies (also monoclonal antibodies) a pre-dilution of *LX-Buffer* with salt-free water can be useful to get the previously seen signal. But in this case also the unwanted bindings or cross-reactivities can partly occur again, depending on the chosen dilution with water.

Although *LX-Buffer* is used as an assay buffer it is necessary to saturate surfaces like ELISA-wells or membranes with a blocker. We recommend the use of Blocking Solution.

LX-Buffer can be used additionally as a washing buffer – especially in delicate or interference-sensitive assays like immuno-PCR.

Components of immunoassays – as well as possibly of *LX-Buffer* – maybe quench the fluorescence of fluorescein dyes. Therefore we recommend the use of Oyster* (Denovo Biolabels), CyDye** (Amersham) or Alexa*** (Molecular Probes) fluorescence dyes.

We strongly recommend that the effectiveness of *LX-Buffer* for a certain application is tested before.

*Oyster is a registered trade mark of the company Denovo Biolabels.

**CyDye is a registered trade mark of the company Amersham Biosciences.

***Alexa Fluor Dye is a registered trade mark of the company Molecular Probes.

ProClin is a registered trade mark of Rohm and Haas Company.