LowCross-Buffer® *(Cat. No. CR100-LS)*

Antibody and sample diluent for minimizing nonspecific binding, cross-reactivities and matrix effects in immunoassays

Storage:	2 - 8 °C or -15 to -30 °C (tolerates repeated freezing and thawing cycles)
pH-value at 19.0 - 21.0 °C:	7.2 ± 0.2
Preservative:	contains < 0.0014 % [w/w] reaction mass of CMIT/MIT (3:1)
Expiry date when stored unopened:	see label on the bottle
	For general laboratory use

Fields of application

ELISA: dilution buffer for specimen and 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 detection antibodies

Instructions for use

LowCross-Buffer® is ready-to-use. Please shake the buffer thoroughly before use.

Dilution of the specimen:
Standards and samples for ELISA and protein arrays should be diluted with *LowCross-Buffer®* at 1:2 or higher. A useful dilution for most applications is 1:10 (1 part sample in 9 parts *LowCross-Buffer®*). Standards and samples should be treated identically.

Dilution of antibodies:
Antibodies can be diluted as required in *LowCross-Buffer®* according to the respective recommendation for dilution in the antibody data sheet. This applies to both primary and secondary antibodies.

Appearance of signal reduction:
The *LowCross®-effect* suppresses low and medium affinity binding events. As a consequence, a slight signal reduction may occur if polyclonal antibodies (which generally also contain low- and medium-affinity binding components) are used. In this case, the amount of high-affinity antibodies can be raised by moderately increasing the antibody concentration to achieve the desired signal strength again. The unwanted low and medium-affinity binding will remain suppressed by the *LowCross®-effect.*

When using low- or medium affinity monoclonal antibodies, signal deletion may occur as the *LowCross®-effect* completely suppresses their binding. We recommend the use of suitable high-affinity antibodies. The suitability of *LowCross-Buffer®* for the respective assay and the respective conjugates must be tested by the user.

Regardless of the use of *LowCross-Buffer®*, it is necessary to saturate surfaces such as ELISA wells or membranes with a blocking buffer to avoid non-specific binding. For this purpose, we recommend *The Blocking Solution* (Cat. No. CR110-LS). In rare cases, e.g. samples with high-affinity heterophilic

antibodies, interferences may still occur when using *LowCross-Buffer*® and *The Blocking Solution*. In such cases, the use of *Assay Defender*® (Cat. No. CR180-LS) can be helpful.

LowCross-Buffer® can also be used as a wash buffer for particularly interference-prone and sensitive assays such as immuno-PCR.

Note: CANDOR products are shipped at ambient temperature. Stability studies have demonstrated that prolonged exposure to ambient conditions does not affect product quality.

For further information please visit www.candor-bioscience.com.

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