

LowCross-Buffer® (5x)

(catalog no. 303)

Concentrated antibody and sample diluent for minimizing nonspecific binding, cross-reactivities and matrix effects in immunoassays. Protein- and animal-free

Storage:	2 – 8 °C
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

To prepare a working solution, *LowCross-Buffer*® (5x) must be diluted 1:5 into purified water or another buffer - e.g. Sample Buffer protein-free (catalog no. 305) - before use (1 part of *LowCross-Buffer*® (5x) + 4 parts of diluent).

Please shake *LowCross-Buffer*® (5x) thoroughly prior to dilution.

If the 1x working solution of *LowCross-Buffer* (5x) is stored for extended periods, please ensure adequate supplementation with preservatives to maintain stability.

Dilution of the specimen:

Standards and samples for ELISA and protein arrays should be diluted with the working solution of *LowCross-Buffer*® (5x) at 1:2 or higher. A useful dilution for most applications is 1:10 (1 part sample in 9 parts *LowCross-Buffer*® (5x) working solution). Standards and samples should be treated identically.

Alternatively, *LowCross-Buffer*® (5x) can also be diluted into the sample (1 part of *LowCross-Buffer*® (5x) + 4 parts of sample)


Dilution of antibodies:

Antibodies can be diluted as required in the working solution of *LowCross-Buffer*® (5x) 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 in order 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*[®] (5x) for the respective assay and the respective conjugates must be tested by the user.

Regardless of the use of *LowCross-Buffer*[®] (5x), 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* (catalog no. 110).

LowCross-Buffer[®] (5x) can also be used as a wash buffer for particularly interference-prone and sensitive assays such as immuno-PCR.

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

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