

LowCross-Buffer®

Product overview

Catalog number	CR100
Description	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 RESEARCH OR FURTHER MANUFACTURING USE ONLY

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 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® 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 (catalog no. CR110). 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® (catalog no. CR180) may be useful.

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



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