

Buffers & Solutions

ELISA

Protein Arrays

Western Blotting

Lateral Flow Assays

Immunohistochemistry

CANDOR
Bioscience GmbH



- **optimising immunoassays**
- **ready-to-use buffers**
- **DIN EN ISO 9001:2008 certified**

Welcome to CANDOR Bioscience

We are specialised in optimising immunoassays. Our products help to increase the reliability of assay results and to make your work easier.

Problems such as matrix effects, cross-reactivities, high background and non-specific binding can be avoided.
Forget about these problems!

Our intention is to make your assay more robust and reliable.



**Made in
Germany**

CANDOR
Bioscience GmbH



All buffers and solutions of CANDOR are manufactured in our own facility in Weissensberg, Bavaria. Thus all buffers are "Made in Germany". The quality conforms to highest requirements.

CANDOR Bioscience is certified for **DIN EN ISO 9001:2008**. The current certificate is available on our webpage. All batches run through an analytical control and are authorised by our quality management before being sold. Therefore all products can be used directly in regulated areas such as **GLP laboratories (Good Laboratory Practice)**.

If you are interested in services such as assay development, specimen measurements, assay optimisation or beta-testing of your immunoassays (ELISA kits etc.), please feel free to contact us.

QM

We work according to DIN EN ISO 9001:2008.

Our quality system includes:

- standardised records and documentation in the entire production site
- standard operation procedures (SOPs) for all relevant work steps
- inspection equipment monitoring
- traceability of all production lots and raw materials.

All products are for research use only, not for diagnostic use.

www.candor-bioscience.com

Trust our experience!



- **LowCross-Buffer®**
- LowCross-HRP®
- The Blocking Solution

LowCross-Buffer®

The innovative assay buffer for ELISA, EIA, RIA, protein arrays, Western blotting and immuno-PCR.

LowCross-Buffer® was specially developed to minimise interference in immunoassays.

LowCross-Buffer® minimises

- > matrix effects
- > non-specific binding
- > cross-reactivity

Be more specific





The formulation of LowCross-Buffer® helps to reduce interference in immunoassays. Thus quality of detection can be significantly improved. HAMA (human anti-mouse antibody) interference can be avoided. Furthermore non-specific binding of the antibodies, negative effects of interfering substances and low or medium affinity cross-reactivities of the antibodies are minimised. In addition matrix effects, derived e.g. from blood sera or plasma specimen are reduced. That means that matrix effects no longer worsen detection of analytes.

Minimisation of all these negative effects upgrades the quality of the assay and improves the reliability of results.

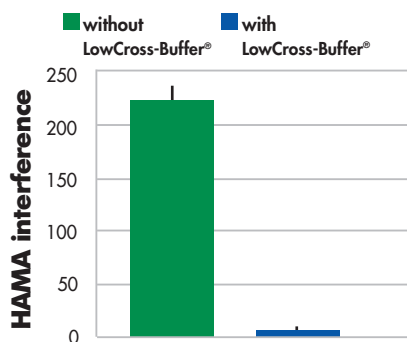
LowCross-Buffer® is free of phosphate.

Ready-to-use

Available package sizes:

50 ml	order number	100 050
125 ml	order number	100 125
500 ml	order number	100 500

Substitute for HAMA blockers



The effectiveness of LowCross-Buffer® towards HAMA interferences has been quantified by a CE-certified ELISA.

Improve your assays!

- LowCross-Buffer®
- **LowCross-HRP®**
- The Blocking Solution

LowCross-HRP®

Gives you two excellent products in one great buffer solution.

- HRP enzyme stabilizer
- HAMA-blocker substitute
- Interference reducer





LowCross stands for superior reliability by reducing assay interferences including HAMA-derived effects.

LowCross-HRP® gives peroxidase-antibody conjugates the crucial long-term stability over several years even in a ready-to-use dilution.

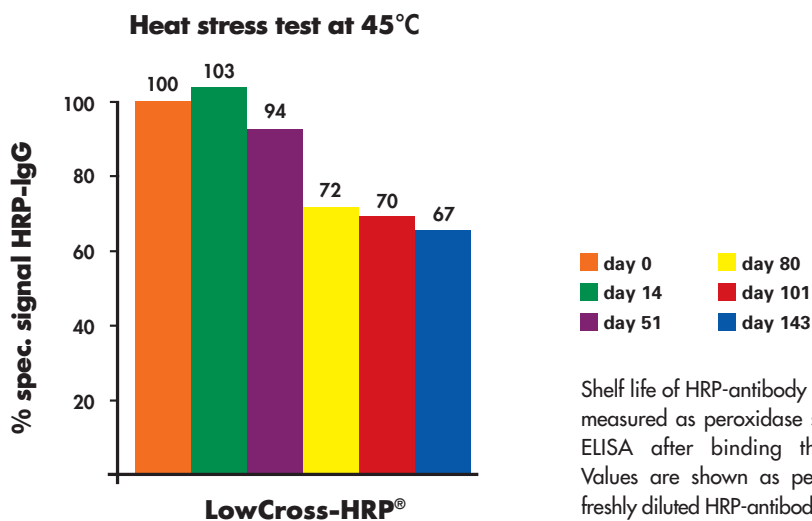
Ready-to-use

Available package sizes:

50 ml order number 200 050

125 ml order number 200 125

500 ml order number 200 500



Shelf life of HRP-antibody conjugate is measured as peroxidase signal in an ELISA after binding the analyte. Values are shown as percentage of freshly diluted HRP-antibody conjugate.

Improve your assays!

- LowCross-Buffer®
- LowCross-HRP®
- **The Blocking Solution**

The Blocking Solution

The Blocking Solution for ELISA, EIA, RIA, protein arrays, Western blotting, immuno-PCR and immunohistochemistry. Our most effective Blocker – measurably and reproducibly – really in a class of it's own.

The Blocking Solution

- > reduces background effectively
- > reduces non-specific binding to surfaces
- > improves sensitivity





The Blocking Solution inhibits non-specific and unwanted binding to surfaces. The Blocking Solution saturates free surface binding sites (for example on microtiter plates, Western blotting membranes or slides) avoiding undesirable binding of analytes or detection antibodies to surfaces. This leads to significantly reduced background and improved sensitivity of the assay.

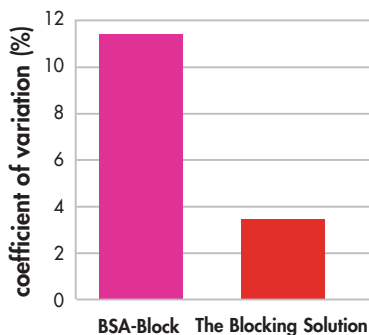
The Blocking Solution is based on highly purified casein which has been chemically modified. In addition the casein molecules were fragmented in an advanced production process. The specific procedure during fragmentation of the casein molecules results in a wide spectrum of variably sized casein fragments – reproducible from batch to batch.

Ready-to-use

Available package sizes:

50 ml order number 110 050
125 ml order number 110 125
500 ml order number 110 500

Improving precision



The Blocking Solution impressively lowered the coefficient of variation as shown in this successful assay validation of a competitive ELISA.
with n=96, measured at the maximum BO

Improve your assays!

- The Blocking Solution
- **SmartBlock™**
- BSA-Block

SmartBlock™

The new Blocker for ELISA, EIA, RIA, Western blotting, protein arrays and immuno-PCR.

SmartBlock™ – the modern standard for efficiency!

- blocks efficiently
- easy to use and competitively priced
- free of BSA!





SmartBlock™ saturates free surface binding sites (for example on microtiter plates, Western blotting membranes or slides) avoiding undesirable binding of analytes or detection antibodies to surfaces. SmartBlock™ is a modern blocker based on peptides. To further improve the blocking efficiency, peptides were chemically modified in a specific process. The result is a peptide solution with very good blocking characteristics. At the same time SmartBlock™ has a very good lot-to-lot consistency, previously obtained only by synthetic blockers.

Problems with interactions and cross-reactivities arising from BSA, which is present in many blockers are a priori avoided by the use of SmartBlock™, as it is devoid of serum proteins such as BSA. In case satisfying results cannot be obtained with SmartBlock™, e.g. if your assay measures analytes in plasma, serum or tissue specimen, we strongly recommend to use our highly effective product The Blocking Solution instead.

Ready-to-use

Available package sizes:

125 ml order number 113 125

500 ml order number 113 500

For better performance!

- The Blocking Solution
- SmartBlock™
- **BSA-Block**

BSA-Block

Blocker for ELISA, EIA, Western blotting, protein arrays and immuno-PCR.

BSA-Block

- > saturates free binding sites
- > well established
- > competitively priced





BSA-Block saturates free binding capacities on plastic consumables and other surfaces like ELISA plates and blotting membranes.

BSA-Block is a well established, versatile blocker for many applications.

The high purity and control of the raw materials enable good lot-to-lot consistency for this blocker based on BSA. Therefore a high reliability of the assay over years is given even when different lots are used.

If you experience background due to non-specific binding even when using BSA-Block, we recommend our much more effective product The Blocking Solution.

Ready-to-use

Available package sizes:

125 ml order number 115 125

500 ml order number 115 500

For better performance!

- **Sample Buffer**
- Washing Buffer
- Coating Buffer
- Stripping Buffer

Sample Buffer

Sample and antibody dilution buffer for ELISA, EIA, RIA, protein arrays, Western blotting, immuno-PCR and immunohistochemistry.

- > for diluting the analyte or specimen
- > for diluting the detection antibody
- > free of phosphate





Sample Buffer is the standard specimen and antibody diluent for many assays.

Sample Buffer is designed for trouble free assays without interference. If you have background or false-positives – for example derived from cross-reactivities or matrix effects - we recommend to use LowCross-Buffer® rather than Sample Buffer.

Specimen with analyte – as well as the detection antibody – is diluted in Sample Buffer and then used in the assay.

Sample Buffer is also available without Tween or other detergents for use in immunohistochemistry.

Ready-to-use

Available package sizes:

Sample Buffer

50 ml order number 105 050
125 ml order number 105 125
500 ml order number 105 500

Sample Buffer without Tween for IHC

50 ml order number 106 050
125 ml order number 106 125
500 ml order number 106 500

- Sample Buffer
- **Washing Buffer**
- Coating Buffer
- Stripping Buffer

Washing Buffer

Wash buffer for ELISA, EIA, RIA,
protein arrays, Western blotting,
immuno-PCR and immunohistochemistry.

Washing Buffer

- time saving
- optionally based on TRIS or PBS
- suitable for ELISA washer

**Be more
dependable**





Washing steps are needed to remove unbound and excessive components which are able to interfere with the assay. Washing Buffer is suitable for automatic washers. (Please note the specifications of your device and follow the instruction manual of your washer!)

Buffer is optionally based on TRIS or PBS.

For immunohistochemistry also available without Tween and detergents.

10 x stock solution

Available package sizes:

Washing Buffer PBS

500 ml order number 140 500

Washing Buffer PBS without Tween for IHC

500 ml order number 141 500

Washing Buffer TRIS

500 ml order number 145 500

Washing Buffer TRIS without Tween for IHC

500 ml order number 146 500

- Sample Buffer
- Washing Buffer
- **Coating Buffer**
- Stripping Buffer

Coating Buffer

**Coating Buffer for ELISA, EIA, RIA,
protein arrays and immuno-PCR.
Coating Buffer for easy immobilisation!**

The solution for adsorptive and functional immobilisation of proteins and antibodies on plastic surfaces (for example micro-titer plates) or other protein binding surfaces.

Coating Buffer

- easy to use
- optionally based on PBS (pH 7.4) or carbonate (pH 9.6)





Depending on the surface as well as on the proteins or antibodies the required incubation time can vary. Consequently, individual optimisation of the incubation procedure is recommended. Depending on the protein or the antibody the pH of the Coating Buffer is crucial for efficient immobilisation. Select from Coating Buffer pH 7.4 and pH 9.6, as the pH-value can have an influence on the steric structure of proteins or antibodies, thus affecting their immobilisation.

For optimisation of the coating procedure of a newly developed immunoassay we strongly recommend testing the two Coating Buffers side by side.

10 x stock solution

Available package sizes:

Coating Buffer pH 7.4 (PBS)

125 ml order number 120 125

500 ml order number 120 500

Coating Buffer pH 9.6 (carbonate)

125 ml order number 121 125

500 ml order number 121 500

- Sample Buffer
- Washing Buffer
- Coating Buffer
- **Stripping Buffer**

Stripping Buffer

For reprobing on Western blotting membranes.
Easy and safe removal of antibodies!

- convenient to use
- non-malodorant and non-hazardous,
because free from DTT and mercaptoethanol
- no need for a fume hood





Stripping Buffer removes reaction solution and primary and secondary antibodies from Western blotting membranes. After stripping the membrane can be used for repeated detection (reprobing) with different antibodies.

Stripping Buffer does not contain mercapto-ethanol nor DTT.

Stripping Buffer is odorless and working in the lab becomes much more pleasant than with mercapto-ethanol based formulations!

Ready-to-use

Available package sizes:

50 ml	order number	150 050
125 ml	order number	150 125
500 ml	order number	150 500

- **Antibody Stabilizer**
- Liquid Plate Sealer®
- HRP-Protector™

Antibody Stabilizer

Stabilizer for long-term storage of proteins and antibodies in solution. Trouble-free long-term storage at 4°C!

Antibody Stabilizer contains additives for preserving the conformation of proteins and antibodies in solution.

Antibody Stabilizer

- stabilises by conserving protein structure
- optionally based on TRIS or PBS





Antibody Stabilizer conserves the structure of proteins and antibodies preventing them from losing functionality during storage. Just dissolve proteins or antibodies in Antibody Stabilizer and store in the refrigerator.

Ready-to-use

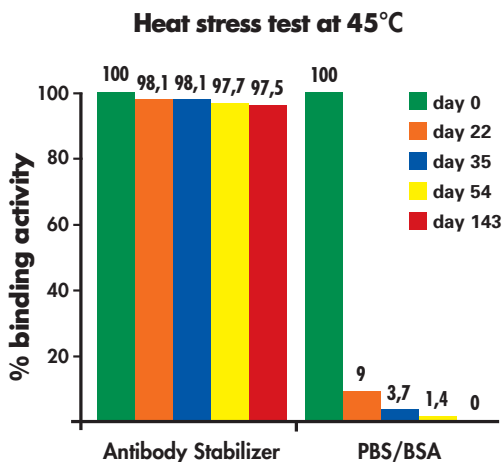
Available package sizes:

Antibody Stabilizer based on TRIS

50 ml order number 130 050
125 ml order number 130 125
500 ml order number 130 500

Antibody Stabilizer based on PBS

50 ml order number 131 050
125 ml order number 131 125
500 ml order number 131 500



Shelf life of an antibody is measured as binding in an ELISA after storage under temperature stress. The tests were performed with an antibody-concentration of only 400 ng/ml.

Stability you can trust!

- Antibody Stabilizer
- **Liquid Plate Sealer®**
- HRP-Protector™

Liquid Plate Sealer®

Stabilizer for coated ELISA plates and dried proteins.
Allows long-term storage of coated plates under dry
conditions even at room temperature.

Liquid Plate Sealer®

- seals ELISA plates
- stabilises immobilised antibodies
- free of BSA





After immobilisation of the antibodies/antigens and blocking, Liquid Plate Sealer® seals the plates with a uniform stabilizing layer demonstrating good solubility and without affecting the assay afterwards.

Liquid Plate Sealer® can also be used for stabilising antibodies and antigens after coating on polystyrene- or glass-surfaces for protein arrays.

Liquid Plate Sealer® is used for ELISA kit production. Research laboratories use Liquid Plate Sealer® for easy storage under lab conditions without using desiccants.

Allows long-term storage of coated plates under dry conditions even at room temperature.

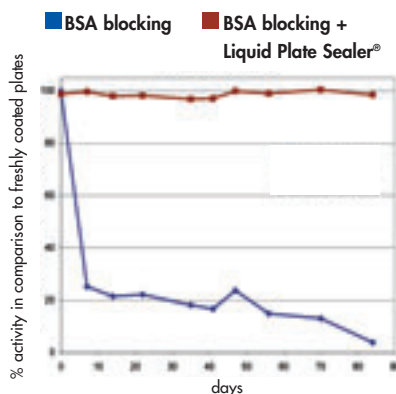
The recommended optimum long-term storage temperature of coated plates is 2-8°C.

Ready-to-use

Available package sizes:

50 ml	order number	160 050
125 ml	order number	160 125
500 ml	order number	160 500

Heat stress test at 37°C



A polyclonal antibody was coated at 0.1 µg per well. A standard blocking procedure with BSA was compared to blocking with BSA and additionally incubation with Liquid Plate Sealer®.

Stability you can trust!

- Antibody Stabilizer
- Liquid Plate Sealer®
- **HRP-Protector™**

HRP-Protector™

HRP-Protector™ preserves enzymatic activity and conformation of your HRP (horse radish peroxidase) conjugates.

- for long-term stability
- ready-to-use





HRP-Protector™ gives peroxidase conjugates the crucial long-term stability over several years even when stored in low concentrated ready-to-use dilutions. It maintains the activity of conjugates of antibodies and of Neutravidin/Streptavidin with HRP.

HRP-Protector™ can be used directly as an assay buffer for incubating the HRP-conjugates. This enables assays without pre-dilution steps for the conjugates after long-term storage. No need to freeze and thaw, no need for pre-dilution.

Conjugates are simply stored ready-to-use at 4°C for easy handling.

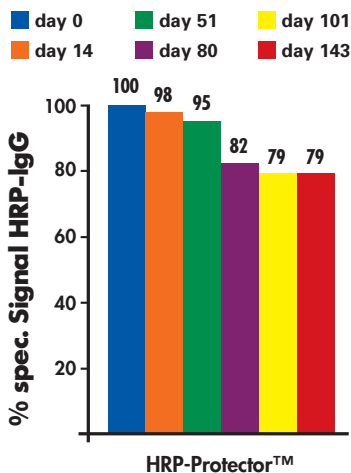
Shelf life of HRP-antibody conjugate is measured as peroxidase signal in an ELISA after binding the analyte. Values are shown as percentage of freshly diluted HRP-antibody conjugate.

Ready-to-use

Available package sizes:

50 ml	order number	220 050
125 ml	order number	220 125
500 ml	order number	220 500

Heat stress test at 45°C



Stability you can trust!

- **ready-to-use buffers**
- **optimising immunoassays**
- **DIN EN ISO 9001:2008 certified**

CANDOR Packages

It is useful to test different solutions in comparison when starting with the development or optimisation of a new assay. Thus we offer introductory trial packages with reduced pricing. Any customer can order these packages once to get a clear test result, demonstrating which products give best performance in an assay. Optimizers like LowCross-Buffer® and The Blocking Solution can be tested with the CANDOR Starter Packages. With a CANDOR Blocking Sampler Package one can easily test the blocker of choice for a new assay.

All packages are available in two different sizes.

**Be more
dependable**



**CANDOR Starter Package Small**

for ELISA, EIA, RIA, protein arrays,
Western blotting and immuno-PCR
contains:

50 ml LowCross-Buffer®
50 ml The Blocking Solution
125 ml Washing Buffer TRIS 10x
order number: 600 001

CANDOR Starter Package IHC Small

for immunohistochemistry
contains:

50 ml LowCross-Buffer®
50 ml The Blocking Solution
125 ml Washing Buffer TRIS
without Tween 10x
order number: 600 011

**CANDOR Blocking Sampler
Package Small**

contains:

50 ml The Blocking Solution
50 ml BSA-Block
50 ml SmartBlock™
order number: 600 021

CANDOR Starter Package Large

for ELISA, EIA, RIA, protein arrays,
Western blotting and immuno-PCR
contains:

125 ml LowCross-Buffer®
125 ml The Blocking Solution
125 ml Washing Buffer TRIS 10x
order number: 600 002

CANDOR Starter Package IHC Large

for immunohistochemistry
contains:

125 ml LowCross-Buffer®
125 ml The Blocking Solution
125 ml Washing Buffer TRIS
without Tween 10x
order number: 600 012

**CANDOR Blocking Sampler
Package Large**

contains:

125 ml The Blocking Solution
125 ml BSA-Block
125 ml SmartBlock™
order number: 600 022

- **optimising immunoassays**
- **DIN EN ISO 9001:2008 certified**
- **customised solutions**

Support & Services

We believe excellent technical product support is key to your success.

We would like to offer our support concerning all your questions with immunoassays. Our qualified team has long-term experience in assay development and validation. Using your assay for medical or pharmaceutical research? Developing an assay for food analytics? Do you optimise a diagnostic product and want to improve its shelf life or the consistency of your results? Please feel free to contact us by phone or email **support@candor-bioscience.com**.

We look forward to hearing from you!

CANDOR's products are available in bulk quantities for manufacturers of test kits e.g. for IVD or food analytics. Please ask for our specific developer kits for optimisation and long time storage of your commercial immunoassays. **Upgrade your shelf lives!**

CANDOR offers production of customised buffers and solutions for bioanalytics. Our flexible production plant serves you with batches from 500 ml to 1200 litres. Bottle or can volumes from 5 ml to 20 l are filled routinely. All solutions can be produced according to your specific recipes under the CANDOR quality system.

You need high quality buffers for your lab, but you don't like to waste time for preparing buffers?

Just ask for your special offer.





Contact

Dr. Peter Rauch (assay development)
Dr. Sabine Glöggler (marketing)
Dr. Tobias Polifke (quality management)
Angela Zellmer (production)

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Photographs

Some pictures show natural camouflage and fading into the background. These moments were captured by Dieter Schonlau in the rainforests of Borneo, Sumatra and Amazonia. More information about his projects for the preservation of the fragile ecosystems in rainforests and about the photographer is accessible on www.wildlifephoto.de

Layout-Design, Print

Marijane Holike
graficARTconcept@t-online.de

Trust our experience!

Perfect Camouflage

**Fusion with the background,
fading into the environment,
simply becoming invisible...**

This is a frequent phenomenon for laboratories that use assays such as ELISA or Western Blotting as well as immunohistochemistry. However, it is also a fantastic natural phenomenon, which can only be captured in detail with a lot of patience and affection.

Enjoy the fascinating illusions created by nature and discover how to easily and efficiently prevent delusions and disappointments in the laboratory caused by interferences.



**Involved in the development of a
challenging immunoassay?**

Let's get in touch!

www.candor-bioscience.com