AURION BLOCKING SOLUTIONS

APPLICATION AREA: ELECTRON MICROSCOPY
LIGHT MICROSCOPY
BIO ASSAYS

PRODUCT INFORMATION

AURION Blocking Solutions are prepared using specially selected compounds. All ruminant proteins are obtained from healthy livestock.

Blocking solutions contain Bovine Serum Albumin and Cold Water Fish Skin Gelatin in phosphate buffered saline with sodium azide as preservative. Normal serum may have been added as indicated on the label.

The following variations are available:

Product code 905.001: serum-free.
For use with Protein A and Protein G Gold conjugates.

Product code 905.002: contains Normal Goat serum.
For use with reagents based on secondary antibodies raised in Goat.

Product code 905.003: contains Normal Rabbit serum.
For use with reagents based on secondary antibodies raised in Rabbit.

Product code 905.004: contains Normal Sheep serum.
For use with reagents based on secondary antibodies raised in Sheep.

Product code 905.005: contains Normal Donkey serum.
For use with reagents based on secondary antibodies raised in Donkey.

The supplied amount accommodates:
300 LM specimens at 100 µl/specimen (~ 3 drops)
1000 EM grids at 30 µl/specimen (~ 1 drop)

The blocking capacity of each lot is determined using a dot-spot test system as described by Moeremans et al., *J. Immunol. Methods* 74, (1984), 353.
AURION Blocking Solutions have a guaranteed shelf life of 18 months from the date of quality control analysis.

AURION Blocking Solutions can be applied for ImmunoGold detection systems as well as for enzyme based and fluorescent detection systems.

The products should be stored at 4-8°C.
Freezing is not recommended.

GENERAL REMARKS

Procedures to eliminate background comprise three main steps:
1. Suppression of residual aldehyde activity by using an aldehyde inactivating reagent such as sodium borohydride and hydroxyl ammonium chloride (0.1%), or a low molecular weight compound such as glycine (50 mM) in PBS.
2. Blocking with high molecular weight compounds as present and under conditions in the AURION Blocking Solutions
3. By an appropriate incubation and wash solution such as AURION BSA-c™ (see auxiliary products) which further reduces the risk of background by competition.

These steps should be balanced for optimum results.

ON-GRID MARKING FOR ELECTRON MICROSCOPY:
The use of nickel grids is recommended, especially if silver enhancement procedures are intended.
Grids are floated on top of drops of Blocking Solution displayed on a sheet of Parafilm.
Transfer of the grids from droplet to droplet or from well to well can be performed with fine forceps or with flattened loops.

PRE-EMBEDDING LABELING:
Specimens are kept in Blocking Solution on a rocking table e.g. in small Petri dishes or 6-24 well plates.

SLIDE or COVERSLIP LABELING in LIGHT MICROSCOPY:
A few drops of Blocking Solution are applied to cover the specimen.

BIO ASSAYS:
Specimens (e.g. immunoblot strips) are kept in Blocking Solution on a rocking table e.g. in screw-cap sealed disposable tubes.

ACTUAL USE

1 Inactivate residual aldehyde groups.

2 (FOR PROTEIN A or PROTEIN G REAGENTS)
Use Blocking solution serum-free, 15-30 minutes.

(FOR SECONDARY ANTIBODY AND STREPTAVIDIN
REAGENTS)
Use Blocking solution with normal serum (same species as the antibody in the second immuno incubation step) , 15-30 minutes.

3 Wash with incubation buffer and proceed with the primary antibody incubation.

RECOMMENDED INCUBATION BUFFER SYSTEM

PBS, (20 mM Phosphate buffer, 150 mM NaCl), pH 7.4
0.1-0.2 % AURION BSA-C™
10 mM NaN_3
check the pH and adjust to 7.4 if necessary

Note on background prevention:

A special AURION NEWSLETTER dealing with the topic of background is available on request.

AUXILIARY PRODUCTS

CODE	DESCRIPTION
900.022	AURION BSA-c™ (10%), 100ml
900.099	AURION BSA-c™ (10%), 30ml

AURION
Immuno Gold Reagents & Accessories
Custom Labelling

Binnenhaven 5
6709 PD WAGENINGEN, THE NETHERLANDS
phone: (+31)-317-415094 fax: (+31)-317-415955
http://www.aurion.nl/
info@aurion.nl