

Thermo Scientific Nunc Immobilizer Glutathione

Instruction protocol

Thermo Scientific Nunc Immobilizer Glutathione

The Thermo Scientific™ Nunc™ Immobilizer™ Glutathione Plates are manufactured using a patented photochemical method¹ for covalent coupling of ligands to polymer surfaces.

Glutathione is coupled via a spacer to the plate surface.

The Nunc Immobilizer Glutathione Plates are designed for optimal binding of glutathione-S-transferase (GST)-tagged proteins.

Materials:

- Nunc Immobilizer Glutathione Plates
- GST-tagged protein of choice

Reagents:

- Coupling buffer: PBS (Phosphate Buffered Saline), pH=7.2
- Washing buffer: PBST (Phosphate Buffered Saline containing 0.05% (v/v) TWEEN® 20)

Coupling protocol for 96 well plate:

1. Prepare a solution of your purified GST or a GST- tagged protein (0.01-1 µg/ml) in PBS. Note! Do not whirl mix, as the GST-tagged molecule will degrade and prohibit binding of the glutathione
2. Add the protein solution to the wells of the Nunc Immobilizer Glutathione plate (100 µl/well)
3. Incubate the plate/strips with gentle agitation (e.g. 100 rpm) at room temperature (20° - 25°C) for 2 hours, or overnight at +4°C
4. Aspirate the wells and wash with PBST (3 x 300 µl)
5. The plate is now ready for your assay

Coupling protocol for 384 well plate:

1. Prepare a solution of your purified GST or a GST-tagged protein (0.01-1 µg/ml) in PBS. Note! Do not whirl mix, as the GST-tagged molecule will degrade and prohibit binding of the glutathione
2. Add the above solution to the wells of the Nunc Immobilizer Glutathione Plate (50 µl/well)
3. Incubate the plate with gentle agitation (e.g. 100 rpm) at room temperature (20° - 25°C) for 2 hours, or overnight at +4°C
4. Aspirate the wells and wash with PBST (3 x 100 µl/ well)
5. The plates are now ready for your assay

Additional comments and recommendations

It is not necessary to block the plates. During the coupling of GST (Steps 1, 2, and 3 of the protocols) non-ionic detergents like TWEEN 20 should NOT be present, as these will decrease the coupling of purified GST or GST-tagged fusion proteins.

It is recommended to include small amounts of a non-ionic detergent like TWEEN 20 (0.05% (v/v)) in washing buffers and in assay buffers, as this generally improves the signal to noise ratio of the assay.

Stability

Nunc Immobilizer Glutathione Plates can be stored at room temperature to their expiration date, which appears on the case label.

Trademarks and patents:

TWEEN 20 is a registered trademark of ICI American Inc., U.S.A. Immobilizer is a trademark of Exiqon A/S, Vedbaek, Denmark.

The product is produced under license from Exiqon A/S - EP 08 20483 and foreign applications and patents.

References:

- ¹ Jensen, S. P., Rasmussen, S. E., Jakobsen, M. H., Photochemical Coupling of Peptides to Polystyrene MicroWell Plates. Innovations & Perspectives in Solid Phase Synthesis & Combinatorial Chemical Libraries, (1996), 419-422.

thermoscientific.com

© 2014 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries.

ANZ: Australia: 1300 735 292, New Zealand: 0800 933 966; **Asia:** China Toll-free: 800-810-5118 or 400-650-5118; India: +91 22 6716 2200, India Toll-free: 1 800 22 8374; Japan: +81-3-5826-1616; Other Asian countries: 65 68729717
Europe: Austria: +43 1 801 40 0; Belgium: +32 2 482 30 30; Denmark: +45 4631 2000; France: +33 2 2803 2180; Germany: +49 6184 90 6000, Germany Toll-free: 0800 1-536 376; Italy: +39 02 95059 554; Netherlands: +31 76 571 4440; Nordic/Baltic countries: +358 9 329 10200; Russia/CIS: +7 (812) 703 42 15; Spain/Portugal: +34 93 223 09 18; Switzerland: +41 44 454 12 22; UK/Ireland: +44 870 609 9203
North America: USA/Canada +1 585 586 8800; USA Toll-free: 800 625 4327
South America: USA sales support: +1 585 899 7198 **Countries not listed:** +49 6184 90 6000 or +33 2 2803 2000

Thermo
SCIENTIFIC

A Thermo Fisher Scientific Brand