

PRODUCT INFORMATION SHEET

STANDARD WESTERN-BLOT PROTOCOL

1. Perform SDS polyacrylamide gel electrophoresis (SDS-PAGE) with your sample of choice and transfer proteins to either a nitrocellulose or a PVDF membrane.
2. Block residual binding sites by incubating the membrane in "*blocking buffer*" with the appropriate detergent and 1-3% of **Perfect-Block** in either PBS (phosphate buffered saline) or TBS (Tris buffered saline) for 25-60 minutes at RT and constant agitation.
3. Incubate the membrane with the appropriate first antibody in freshly prepared **Perfect-Block** "*blocking buffer*" either at RT for several hours or overnight at 4°C with constant agitation.
4. After first antibody incubation, wash the membrane several times with "*blocking buffer*"
5. Incubate the membrane with secondary antibody of choice in "*blocking buffer*" for 1-2 hours at RT and constant agitation.
6. Wash membrane several times in "*blocking buffer*"
7. Wash membrane twice in PBS or TBS
8. Use detection method of choice

Perfect-Block was mostly used in Western blot application with enhanced chemiluminescence detection (ECL).

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Western-Blot with anti-Phosphotyrosine antibodies (according to Kanakura et al., 1991; JBC (1), 490-495)

- * After electrophoretical transfer of the proteins, residual binding sites on the membrane were blocked by incubating the nitrocellulose in TBST (10 mM Tris pH 8.0, 150 mM NaCl; 0.5% TWEEN 20) containing 3-5 % **Perfect-Block** ("*blocking solution*") for 20-30 minutes at RT.
- * Wash 2 x 5 min in TBST (0,5% Tween; pH 8.0) and incubate for 1-2 hours at RT or overnight with anti-P-Tyr monoclonal antibodies in **Perfect-Block** "*blocking solution*" at 4°C.
- * After incubation wash 4 x 10 minutes in TBST (0,5% TWEEN 20) under constant agitation.
- * Re-block the blot for additional 10-15 minutes with fresh **Perfect-Block** "*blocking solution*".
- * Incubation with secondary anti-mouse antibody (HRP-coupled) in **Perfect-Block** "*blocking solution*" for the desired time.
- * Wash 2 x quickly and 3 x 15 minutes in TBST (0,5% TWEEN 20).
- * Detection with enhanced chemiluminescence system.

Perfect-Block worked also well using anti-phosphoserine or anti-phosphothreonin antibodies. In the meantime, very good experience has been made also with glyco- and lipoproteins.

References:

- Fritsche, J. et al., MCN (Molecular Cellular Neuroscience) 14, 398-418; 1999
- used in Chen, M.S. et al., Nature Vol. 403, 434-439; 2000