

NBP1-19447 Protocol

Immunocytochemistry/Immunofluorescence Protocol for 53BP1 Antibody (NBP1-19447)

Immunofluorescence Protocol

1. Cell Culture

- 1) Incubate cover glasses in 50% H₂SO₄ for 1 hour using a porcelain rack (Thomas Scientific).
- 2) Wash cover glasses for 30 min in running tap water.
- 3) Rinse with dH₂O.
- 4) Incubate cover glasses in 40 ug/ml poly-L-lysine (MW ~70-90kD) for 1 hour at room temperature.
- 5) Wash cover glasses for 1 hour in running tap water.
- 6) Rinse cover glasses 3 times 5 min each in dH₂O.
- 7) Dry cover glasses on filter paper in a dust-free area.
- 8) Sterilize cover glasses inside the laminar flow chamber under UV light for at least 4 hours.
- 9) Detach cell from the plastic surface by incubating them in trypsin solution.
- 10) Resuspend detached cells in culture medium and transfer them to culture dishes with the cover glasses.
- 11) Culture cells up to semi-confluency.

2. Fixation

- 1) Fix in 3% paraformaldehyde, 0.02% glutaraldehyde in PBS for 15 min at room temperature.
- 2) Permeabilize by dipping cells for 10 seconds in 100% methanol (-20 degrees C).
- 3) Incubate cells for 3-times 10 min in 0.5 mg/ml NaBH₄ in PBS, pH 8.0 to reduce aldehyde groups and then rinsed with PBS.

3. Staining

- 1) Drain off culture medium and rinse cover slips with PBS.
- 2) Drain off PBS with any of the above mentioned fixation methods.
- 3) Wash in PBS 3-times 5 min.
- 4) Permeabilize with 0.01% Triton X-100 in PBS for 30 sec (if needed).
- 5) Wash in PBS 3-times 5 min.
- 6) Incubate in 1% BSA, PBS pH 7.5 for 30 min to block unspecific binding of the antibodies. (alternative blocking solutions are: 1% gelatine, 1 % bovine or horse serum)
- 7) Incubate with primary antibody in 1% BSA, PBS pH 7.5 for 60 min (or over night at r.t. depending on antibody concentration and the accessibility of the antigen).
- 8) Wash with PBS pH 7.5, 3-times 10 min.
- 9) Incubate 2nd antibody in 1% BSA, PBS pH 7.5, 60 min at r.t.
- 10) Wash with PBS pH 7.5, 3-times 10 min.