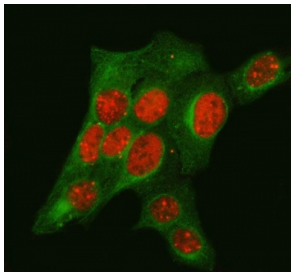
# TP53BP1 Antibody / TP53-binding protein 1 (RQ8168)

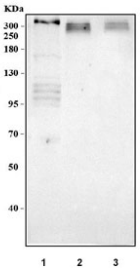
| Catalog No. | Formulation | Size |
|---|---|---|
| RQ8168 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

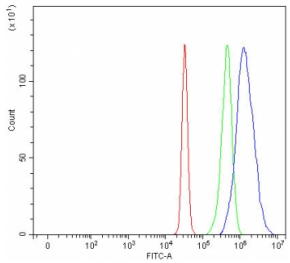
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity purified |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | Q12888 |
| **Localization** | Nuclear |
| **Applications** | Western Blot : 0.5-1ug/ml<br>Immunofluorescence : 5ug/ml<br>Flow Cytometry : 1-3ug/million cells<br>Direct ELISA : 0.1-0.5ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml |
| **Limitations** | This TP53BP1 antibody is available for research use only. |



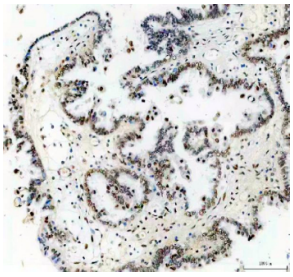
Immunofluorescent staining of FFPE human U-2 OS cells with TP53BP1 antibody (red) and Beta Tubulin mAb (green). HIER: steam section in pH6 citrate buffer for 20 min.




Western blot testing of 1) human HeLa, 2) rat heart and 3) mouse heart tissue lysate with TP53BP1 antibody. Predicted molecular weight: ~214 kDa but may be observed at up to ~450 kDa.




Flow cytometry testing of fixed and permeabilized human HepG2 cells with TP53BP1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= TP53BP1 antibody.



IHC staining of FFPE human ovarian cancer tissue with TP53BP1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

## Description

TP53-binding protein 1 (TP53BP1) is a chromatin-associated protein that plays a critical role in the DNA damage response. It is rapidly recruited to sites of DNA double-strand breaks, where it promotes non-homologous end joining (NHEJ) repair and helps maintain genomic stability. TP53BP1 also functions in checkpoint signaling, contributing to cell cycle arrest following DNA damage.

TP53BP1 interacts with histone modifications such as H4K20me2 and H2AX phosphorylation, serving as a scaffold for DNA repair proteins. Dysregulation of TP53BP1 has been associated with impaired DNA repair capacity, genomic instability, and cancer susceptibility. Its central role in genome maintenance makes it a valuable target for research in cancer biology and therapeutic development.

Using a high-quality TP53BP1 antibody allows for sensitive detection in applications such as western blot, immunohistochemistry, and immunofluorescence. A TP53BP1 antibody from NSJ Bioreagents provides reproducibility and specificity for studies in DNA repair, cell cycle regulation, and cancer research. Selecting the right TP53BP1 antibody is essential for producing reliable and consistent results.

## Application Notes

Optimal dilution of the TP53BP1 antibody should be determined by the researcher.

## Immunogen

E. coli-derived recombinant human protein (amino acids Q1155-E1945) was used as the immunogen for the TP53BP1 antibody.

## Storage

After reconstitution, the TP53BP1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at

-20oC. Avoid repeated freezing and thawing.