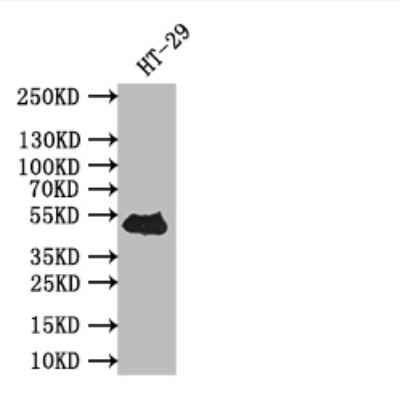
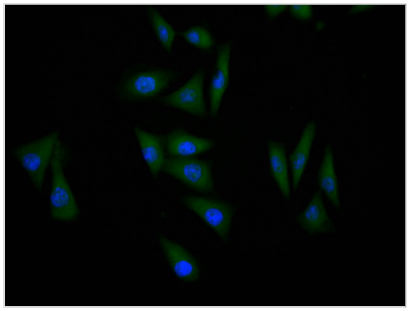
TP53 Recombinant Monoclonal Antibody

Product Code	CSB-RA024077MA1HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P04637
Immunogen	Recombinant Human TP53 protein
Species Reactivity	Human
Tested Applications	ELISA, WB, IF, FC; Recommended dilution: WB:1:1000-1:5000, IF:1:20-1:200, FC:1:20-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling;Cancer;Cell biology
Gene Names	TP53
Clone No.	16D9

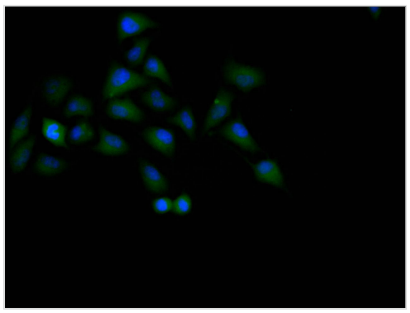
Image



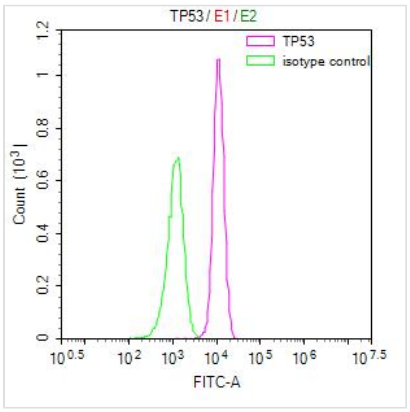
Western Blot
Positive WB detected in: HT-29 whole cell lysate
All lanes: TP53 antibody at 1:500
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 43 kDa
Observed band size: 43 kDa



Immunofluorescence staining of MCF-7 cell with CSB-RA024077MA1HU at 1:60, counter-stained with DAPI. The cells were fixed in 4% for maldehyde and blocked in 10% normal Goat Ser um. The cells were then incubated with the antib ody overnight at 4C. The secondary antibody wa s Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescence staining of Hela cell with C SB-RA024077MA1HU at 1:60, counter-stained with DAPI. The cells were fixed in 4% for maldehyde and blocked in 10% normal Goat Ser um. The cells were then incubated with the antib ody overnight at 4C. The secondary antibody wa s Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing Hela cells surface stained with CSB-RA024077MA1HU (red line) at 1:100. The cells were fixed in 4% formaldehyde (15min) and permeated by 0.2% TritonX-100 for 10min.Then 10% normal goat serum was Incuba ted to block non-specific protein-protein interactions followed by the antibody (1µg /1*10^6cells) for 45 min at 4°C. The secondary ant ibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1/200 dilution for 35 min at 4° C. Isotype control antibody (green line) was mou se IgG1 (1µg/1*10^6cells) used under the same c onditions. Acquisition of >10,000 events was perf ormed.

Description

The process for creating the TP53 recombinant monoclonal antibody begins by obtaining the TP53 antibody genes, which are then introduced into suitable host cells. These cells serve as the foundation for synthesizing TP53 antibodies using a cell-based expression and translation system. This method offers multiple advantages, notably enhancing the purity and stability of the resultant TP53 recombinant monoclonal antibodies, as well as elevating their affinity and specificity. Post-synthesis, the TP53 recombinant monoclonal antibody goes through a purification stage involving affinity chromatography. Subsequently, it undergoes comprehensive testing, including ELISA, WB, IF, and FC assays. This antibody exclusively targets the human TP53 protein.

TP53 is a critical protein involved in maintaining genomic integrity and preventing the formation of cancer. Its functions include cell cycle regulation, DNA repair, apoptosis induction, and various other roles in response to cellular stress. Mutations in the TP53 gene are commonly associated with a higher risk of cancer development due to the loss of its tumor suppressor functions.