

# Affinity-purified Goat Anti-human/mouse/rat p53-Agarose

## ORDERING INFORMATION

**Catalog Number:** GAF1355

**Size:** 250  $\mu$ L beads in 500  $\mu$ L suspension

**Formulation:** PBS with preservative

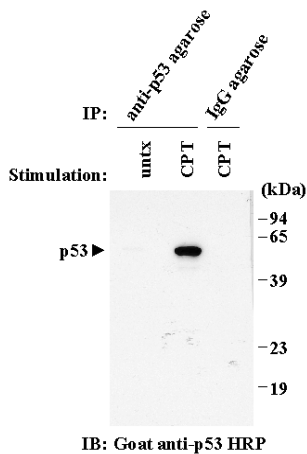
**Storage:** 2° - 8° C

**Specificity:** human/mouse/rat p53

**Immunogen:** *E. coli*-derived recombinant human p53

**Ig Type:** affinity-purified goat IgG

**Application:** Immunoprecipitation



MCF-7 cells were left untreated (untx) or incubated in the presence of 1  $\mu$ M camptothecin (CPT) for 6 hours. Cell extracts were prepared in Cell Lysis Buffer, and incubated 1 hour with (lanes 1-2) goat anti-human/mouse/rat p53-Agarose or with (lane 3) normal goat IgG-Agarose. Adsorbed extracts were washed, eluted, and resolved by SDS-PAGE. Proteins transferred to a PVDF membrane were immunoblotted (IB) with goat anti-human/mouse/rat p53-HRP (R&D Systems, Catalog # HAF1355).

## Preparation

Goat antibodies were raised against purified, *E. coli*-derived, recombinant human p53 (rhp53), affinity-purified on a column derivatized with rhp53, and further purified by isolating the IgG fraction. The affinity purified antibody was conjugated to agarose.

## Formulation

Phosphate-buffered saline (PBS) with preservative.

## Storage

Upon receipt, centrifuge tube to pellet agarose that may have collected in the cap during shipment. The agarose should be stored at 2° - 8° C for up to twelve months without detectable loss of activity. **Do not freeze.**

## Specificity

The antibody detects human, mouse, and rat p53.

## Application

**Immunoprecipitation** - Use 10  $\mu$ L beads (20  $\mu$ L agarose slurry) per 500  $\mu$ g total cell extract.

### Buffers:

#### Wash Buffer

50 mM Tris, pH 7.4  
0.15 M NaCl  
1% NP-40  
20 mM  $\beta$ -glycerophosphate  
10 mM NaF  
1 mM DTT

#### Cell Lysis Buffer

Wash Buffer containing:  
2  $\mu$ g/mL aprotinin  
5  $\mu$ g/mL leupeptin  
2  $\mu$ g/mL pepstatin A

#### 2X SDS Buffer

0.25 M Tris, pH 6.8  
6% SDS  
10% glycerol  
20 mM dithiothreitol  
Bromophenyl Blue

**Cell lysates for immunoprecipitation:** Wash cells twice with cold PBS and extract cell protein by solubilization of  $1 \times 10^6$  -  $5 \times 10^6$  cells in 1 mL cold Cell Lysis Buffer. Solubilize cells for 15 minutes on ice, followed by centrifugation at 6,000 x g for 5 minutes to clear insoluble material. Measure protein concentration and bring 500  $\mu$ g cell extract up to 1 mL per sample with Cell Lysis Buffer.

## Protocols for Immunoprecipitation:

1. Add 20  $\mu$ L goat anti-human/mouse/rat p53-Agarose slurry per 500  $\mu$ g extract and rotate 1 hour at 2° - 8° C.
2. Pellet the Agarose-absorbed complexes by centrifugation at 4,000 x g for 30 seconds. Wash Agarose pellets twice with Wash Buffer.
3. Suspend the washed pellets in 25 - 50  $\mu$ L 2X SDS Buffer and incubate 5 minutes in a boiling water bath.
4. Pellet Agarose and resolve the supernate by SDS-PAGE.

**Visualization:** Proteins from SDS-PAGE gels may be transferred to a PVDF membrane and visualized by Western blotting with goat anti-human/mouse/rat p53-HRP (R&D Systems, Catalog # HAF1355).

**Optimal volumes should be determined by the individual laboratory.**

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**R&D Systems, Inc.**  
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