abcam

Product datasheet

p53 Human Immunocapture Kit ab154470

1 References 3 Images

Overview

Product name	p53 Human Immunocapture Kit
Sample type	Tissue Extracts, Cell Lysate, Tissue Homogenate
Species reactivity	**Reacts with:** Human **Does not react with:** Mouse
Product overview	ab154470 is suitable to immunocapture p53 from whole cell lysates. Traditional immunoprecipitation methods usually result in co-elution of the antibody heavy and light chains that may co-migrate with relevant bands, masking important results. The abcam p53 immunocapture kit resolves this issue by immobilizing the p53 capture antibody onto protein G-agarose beads. The kit includes optimized buffers and reagents for sample preparation and p53 binding and recovery, which shorten the protocol and minimize handling and mixing.
Notes	p53 acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. It is involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division by controlling a set of genes required for this process. One of the activated genes is an inhibitor of cyclin-dependent kinases. Apoptosis induction by p53 seems to be mediated either by stimulation of BAX and FAS antigen expression, or by repression of Bcl-2 expression. p53 is implicated in Notch signaling cross-over. p53 prevents CDK7 kinase activity when associated to CAK complex in response to DNA damage, thus stopping cell cycle progression.
Tested applications	**Suitable for:** IP

Properties

Storage instructions	Store at +4°C. Please refer to protocols.

Components	200 µg
10X Extraction Buffer	1 x 1ml
10X PBS	1 x 10ml
10X Wash Buffer	1 x 10ml
Immunocapture p53 antibody coupled to agarose beads	1 x 200µg

Components	200 µg
SDS Elution Buffer	1 x 1ml

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab154470 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.

Images

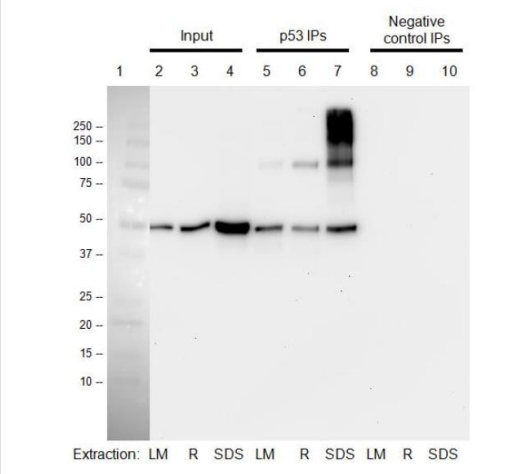

Figure 1: p53 immunocapture kit (ab154470)

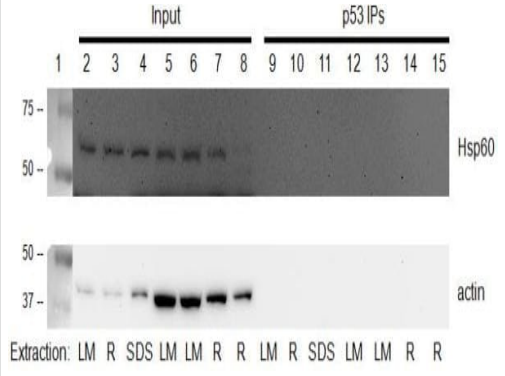

Figure 2: p53 immunocapture kit (ab154470)

p53 immunocapture kit (ab154470) is specific to the p53 protein. Control proteins HSP60 and actin are present in the Hek293 and MCF7 lysate inputs, but are not found in p53 immunoprecipiations.

Hek293 cells were extracted with lauryl maltoside (lanes 2, 9), RIPA buffer (lanes 3, 10) or SDS (lanes 4, 11). MCF7 vehicle-treated cells were extracted with lauryl maltoside (lanes 5, 12) or RIPA buffer (lanes 7, 14). MCF7 cells treated with 1 µM camptothecin were extracted with lauryl maltoside (lanes 6, 13) or RIPA buffer (8, 15). Extracts of whole cells (20 µg, lanes 2-8), and one-fifth of immunoprecipitation samples using the p53 immunocapture beads (1 mg extract per 10 µL beads, lanes 9-15), were analyzed by Western blot using **ab46798** anti-Hsp60 and **ab46805** anti-muscle

actin.

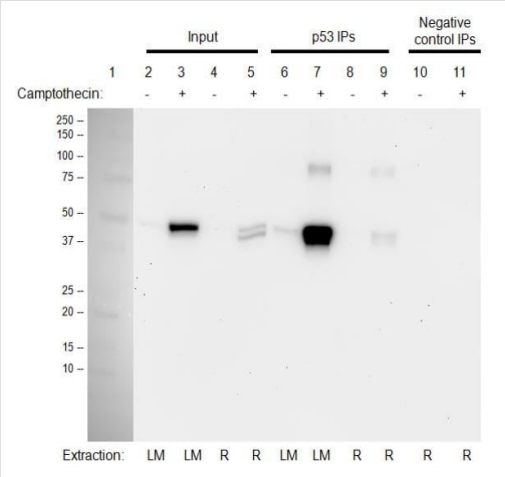

Figure 3: p53 immunocapture kit (ab154470)

Western blot with ab154470 and MCF7 camptothecin-treated cells All lanes: **ab32389** anti-p53 1/1000 Lane 1: MW marker Lane 2: MCF7 cells extracted with lauryl maltoside (LM). Lane 3: MCF7 cells treated with 1 µM camptothecin for 6 hrs, extracted with LM. Lane 4: MCF7 cells extracted with RIPA buffer. Lane 5: MCF7 cells treated with 1 µM camptothecin for 6 hours, extracted with RIPA buffer. Lane 6: IP with 10 µL p53 IP beads and 1 mg MCF7 cells, LM extract. Lane 7: IP with 10 µL p53 IP beads and 1 mg MCF7 cells treated with 1 µM camptothecin for 6 hrs, LM extract. Lane 8: IP with 10 µL p53 IP beads and 1 mg MCF7 cells, RIPA extract. Lane 9: IP with 10 µL p53 IP beads and 1 mg MCF7 cells treated with 1 µM camptothecin for 6 hrs, RIPA extract. Lane 10: IP with 10 µL **ab135397** beads and 1 mg MCF7 cells, RIPA extract. Lane 11: IP with 10 µL **ab135397** beads and 1 mg MCF7 cells treated with 1 µM camptothecin for 6 hours, RIPA extract.

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