

Nano-Traps

Nano-Boosters

Conventional Antibodies

Chromobodies®

F2H® Assay

## Nano-Traps against p53-N-term, p53-C-term & Mdm4/ HdmX for Immunoprecipitation

Pulldown of the p53 proteome with complementary p53-N-term & p53-C-term Traps

- ▶ No heavy & light antibody chains in downstream applications
- ▶ Pull down of human p53 isoforms alpha, beta and gamma with p53 N-term-Trap
- ▶ Pull down of human and mice p53 isoforms alpha with p53 C-term-Trap
- ▶ Pull down of human Mdm4/ HdmX with Mdm4/ HdmX-Trap

### p53-N-term-Trap

Specificity: human  
Epitope: aa 1-81

### p53-C-term-Trap

Specificity: human, mouse  
Epitope: aa 302-393

### Mdm4/ HdmX-Trap

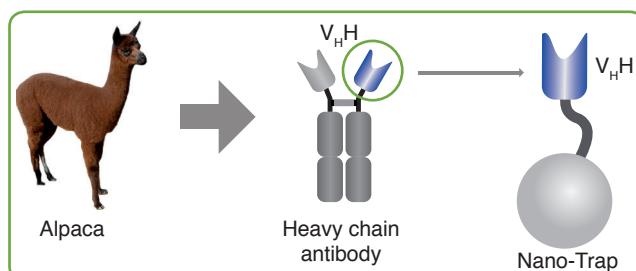
Specificity: human  
Epitope: aa 1-129

### Applications

Use Nano-Traps for:

- Immunoprecipitation (IP)/ Co-IP
- Mass spectrometry

### Technology

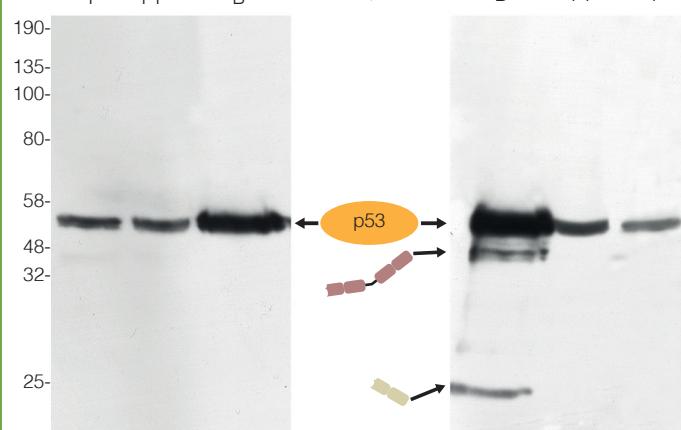


Beside conventional antibodies, *Camelidae* (alpacas, llamas and camels) possess a second type of antibodies called heavy chain antibodies (hcAbs). HcAbs are devoid of light chains and bind their antigen via a single variable domain ( $V_H$ ). These  $V_H$  domains, also known as nanobody, have excellent binding properties and work, coupled to agarose beads, as superior tools for immunoprecipitations.

### Immunoprecipitation of proteins with Nano-Traps

#### p53-N-term-Trap

$\alpha$ -p53 antibody  
- coupled to protein A/G



**No antibody contaminations using Nano-Traps:  
Just the protein of interest**

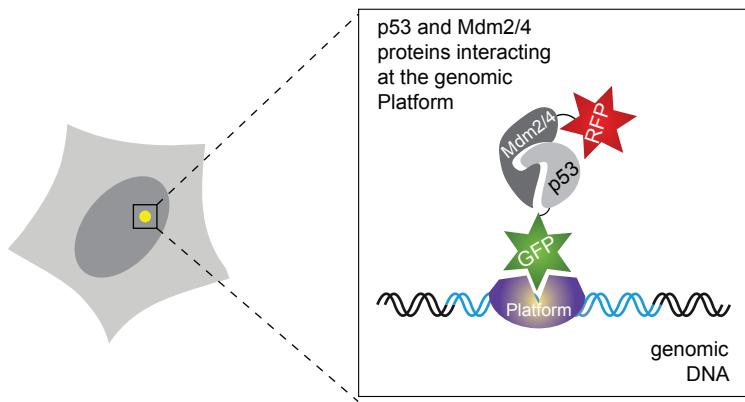
Immunoprecipitations of p53 from human cells expressing p53. Input (I), non-bound (FT) and bound (B) fractions were separated by SDS-PAGE followed by Western Blotting.

# F2H®-Kits p53-Mdm2 and p53-Mdm4

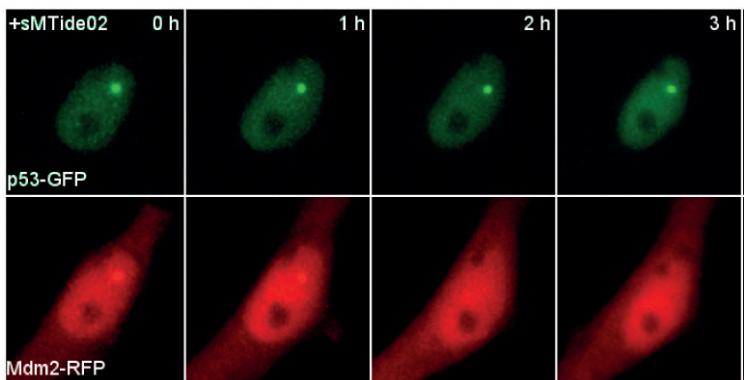
Analyze protein interaction between p53 & its inhibitors Mdm2 or Mdm4

- Visualized in live mammalian cells
- Convenient readout using an epi-fluorescence microscope

ChromoTek's F2H® technology platform is a well-established system for screening protein-protein interactions. The assay enables the analysis of the interaction of proteins and/or protein domains in live mammalian cells.



The F2H®-Kit p53/Mdm2 or F2H®-Kit p53/Mdm4 allow intracellular analysis of the interaction between p53 and its negative regulators Mdm2 or Mdm4. In this assay, GFP-tagged human p53 is forming a green fluorescent spot. Interaction with the RFP-tagged human Mdm2 or Mdm4 can be easily evaluated by fluorescence microscopy as enrichment of red fluorescence at the green spot. Compounds' ability to disrupt the p53/Mdm2 or p53/Mdm4 interactions are determined based on the disappearance of the red spot.



Upon incubation with the inhibitory stapled peptide sMTide02, red spot fades out, indicating disruption of the interaction.

## Order information

| Product name                            | Size                   | Code            |
|---|------------------------|-----------------|
|   | 10 rxns (250µl resin)  | pta-10          |
| p53 N-term-Trap                         | 20 rxns (500µl resin)  | pta-20          |
| ► coupled to agarose beads              | 100 rxns (2.5ml resin) | pta-100         |
|   | 200 rxns (5ml resin)   | pta-200         |
|   | 400 rxns (10ml resin)  | pta-400         |
| p53 N-term-Trap Kit                     |                        |                 |
| ► p53 N-term-Trap                       | 20 rxns (500µl resin)  | ptak-20         |
| ► incl. lysis, wash and elution buffers |                        |                 |
| p53 N-term-Trap                         | 250µl                  | pt-250          |
| ► purified protein                      |                        |                 |
|   | 10 rxns (250µl resin)  | pta2-10         |
| p53 C-term-Trap                         | 20 rxns (500µl resin)  | pta2-20         |
| ► coupled to agarose beads              | 100 rxns (2.5ml resin) | pta2-100        |
|   | 200 rxns (5ml resin)   | pta2-200        |
|   | 400 rxns (10ml resin)  | pta2-400        |
| p53 C-term-Trap Kit                     |                        |                 |
| ► p53 C-term-Trap                       | 20 rxns (500µl resin)  | pta2k-20        |
| ► incl. lysis, wash and elution buffers |                        |                 |
| p53 C-term-Trap                         | 250µl                  | pt2-250         |
| ► purified protein                      |                        |                 |
|   | 10 rxns (250µl resin)  | hta-10          |
| Mdm4/ HdmX-Trap                         | 20 rxns (500µl resin)  | hta-20          |
| ► coupled to agarose beads              | 100 rxns (2.5ml resin) | hta-100         |
|   | 200 rxns (5ml resin)   | hta-200         |
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| Mdm4/ HdmX-Trap Kit                     |                        |                 |
| ► Mdm4/ HdmX-Trap                       | 20 rxns (500µl resin)  | htak-20         |
| ► incl. lysis, wash and elution buffers |                        |                 |
| Mdm4/ HdmX-Trap                         | 250µl                  | ht-250          |
| ► purified protein                      |                        |                 |
| F2H®-Kit p53/Mdm2                       |                        |                 |
| ► F2H®-BHK Cell Line                    | 1 pc                   | f2hk- p53/ mdm2 |
| ► Platform-p53-Mdm2                     |                        |                 |
| ► Control-p53                           |                        |                 |
| F2H®-Kit p53/Mdm4                       |                        |                 |
| ► F2H®-BHK Cell Line                    | 1 pc                   | f2hk- p53/ mdm4 |
| ► Platform-p53-Mdm4                     |                        |                 |
| ► Control-p53                           |                        |                 |
| Platform-p53-Mdm2                       | 100µg                  | f2h-ppm2        |
| Platform-p53-Mdm4                       | 100µg                  | f2h-ppm4        |
| Control-p53                             | 30µg                   | f2h-cp          |

**For research only!**

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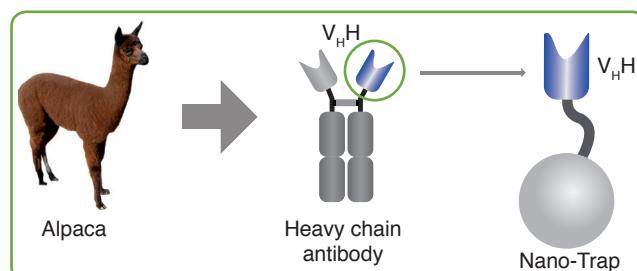
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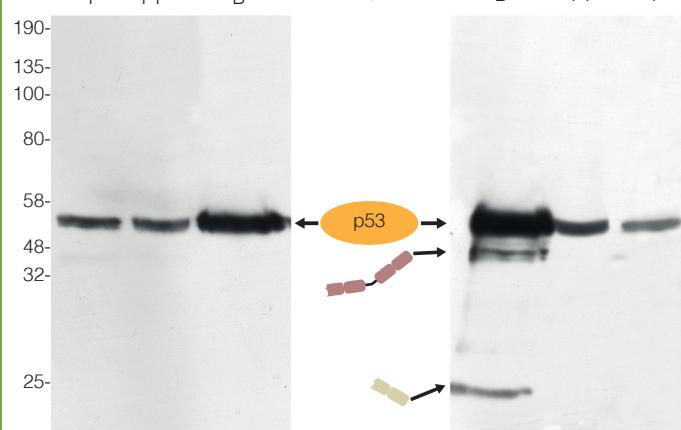
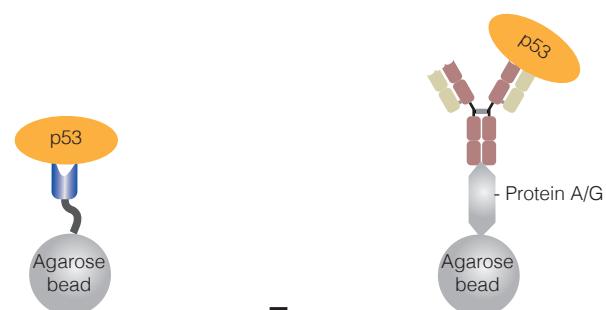


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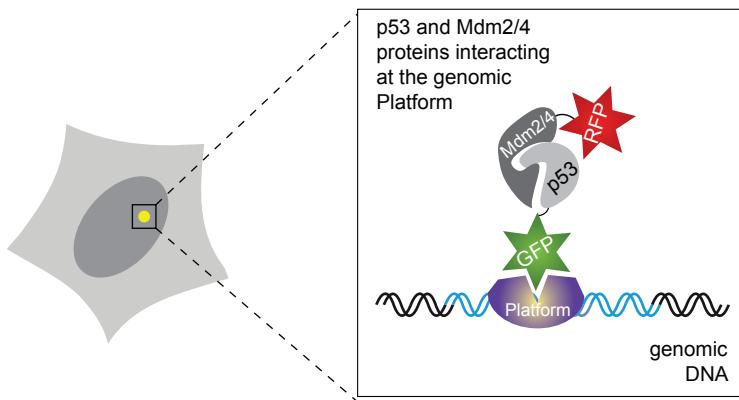
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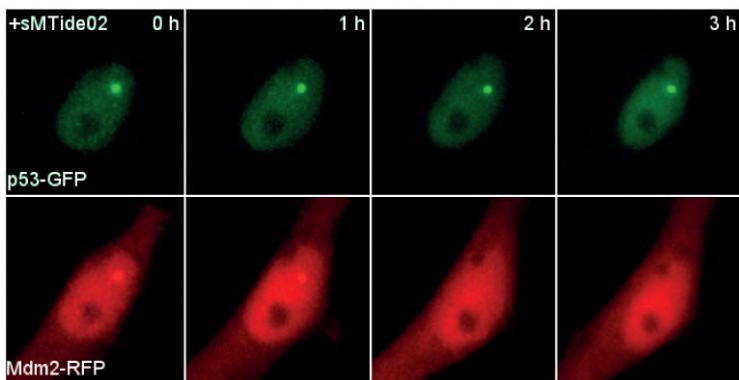
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| p53 C-term-Trap                         | 20 rxns (500µl resin)  | pta2k-20      |
| ► purified protein                      | 250µl                  | pt2-250       |
| Mdm4/ HdmX-Trap                         | 10 rxns (250µl resin)  | hta-10        |
| ► coupled to agarose beads              | 20 rxns (500µl resin)  | hta-20        |
| Mdm4/ HdmX-Trap Kit                     | 100 rxns (2.5ml resin) | hta-100       |
| ► incl. lysis, wash and elution buffers | 200 rxns (5ml resin)   | hta-200       |
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| ► purified protein                      | 250µl                  | ht-250        |
| F2H®-Kit p53/Mdm2                       | 1 pc                   | f2hk-p53/mdm2 |
| ► F2H®-BHK Cell Line                    |                        |               |
| ► Platform-p53-Mdm2                     |                        |               |
| ► Control-p53                           |                        |               |
| F2H®-Kit p53/Mdm4                       | 1 pc                   | f2hk-p53/mdm4 |
| ► F2H®-BHK Cell Line                    |                        |               |
| ► Platform-p53-Mdm4                     |                        |               |
| ► Control-p53                           |                        |               |
| Platform-p53-Mdm2                       | 100µg                  | f2h-ppm2      |
| Platform-p53-Mdm4                       | 100µg                  | f2h-ppm4      |
| Control-p53                             | 30µg                   | f2h-cp        |

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