

## mNeonGreen-Trap for Immunoprecipitation

### Superior pulldown of mNeonGreen-fusion proteins

- ▶ No heavy & light chains in your downstream application
- ▶ Strong binding even under harsh washing conditions
- ▶ Short incubation time of about 30 minutes

### mNeonGreen-Trap

ChromoTek mNeonGreen-Trap is a validated, well-characterized, superior tool for fast and efficient one-step immunoprecipitation of mNeonGreen-fusion proteins and their interacting factors from cell extracts or organelles. mNeonGreen-Trap consists of a single domain antibody from alpaca (see technology section below) coupled to agarose or magnetic agarose. For research applications only.

### Applications

- Immunoprecipitation (IP) / Co-IP
- Mass spectrometry
- Enzyme activity measurements
- CHIP / RIP analysis

### Very strong and stable binding

- Highly affine with a low dissociation constant  $K_D$  of 2nM
- Compatible to harsh wash conditions: 6M urea, 2M NaCl, 10mM DTT, 2% Nonidet P40 Substitute, 1% Triton X-100, 0.2% SDS

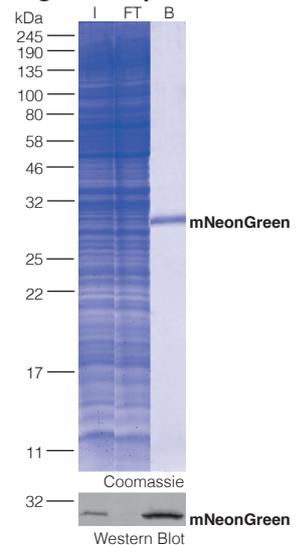
### Properties

- mNeonGreen-Trap recognizes an epitope distinct from anti-mNeonGreen mouse monoclonal antibody (see overleaf)
- Very high binding capacity of 12µg mNeonGreen per 10µl slurry
- Convenient – choose between agarose and magnetic agarose beads

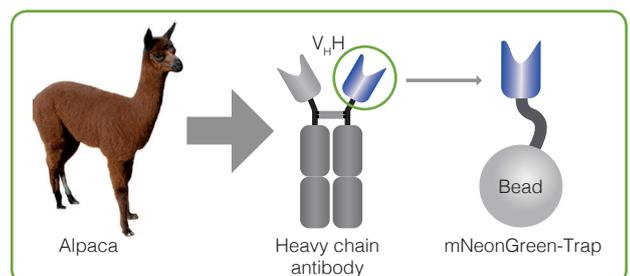
### Technology

Camelidae, e.g. alpacas, possess a type of antibodies called heavy chain antibodies. These are devoid of light chains and bind their antigen via a single variable domain ( $V_H$ ), also known as a nanobody. These  $V_H$  domains have excellent binding properties and can be produced at constant high quality virtually without batch-to-batch variations.

### Single band purification



Immunoprecipitation of mNeonGreen. I input, FT: Flow-through, B: Bound. Coomassie gel and Western blot. Western blot indicates high effectiveness of pull-down



mNeonGreen-Trap: anti-mNeonGreen  $V_H$  or mNeonGreen Binding protein coupled to beads

From cell to gel in less than one hour

# anti-mNeonGreen IgG Antibody

Immunofluorescence, Western Blot, and ELISA of mNeonGreen

- ▶ **Sensitive: detects low expression level proteins**
- ▶ **Validated specific mouse monoclonal antibody**

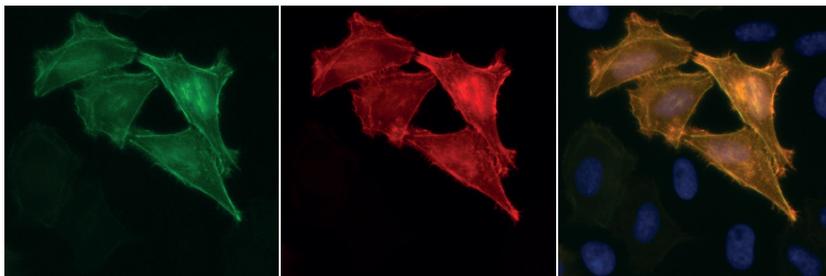
## anti-mNeonGreen IgG antibody 32F6

The ChromoTek anti-mNeonGreen antibody 32F6 is a validated and exceptional tool for sensitive detection of mNeonGreen-fusion proteins in Western blots and Immunofluorescence. The anti-mNeonGreen antibody is a purified mouse monoclonal IgG2a. For research applications only.

### Properties

- Recognizes an epitope different from that of the anti-mNeonGreen V<sub>H</sub>H of the mNeonGreen-Trap
- Highly specific and affine with a low dissociation constant K<sub>D</sub> of 3.5nM

### Immunofluorescence (IF)



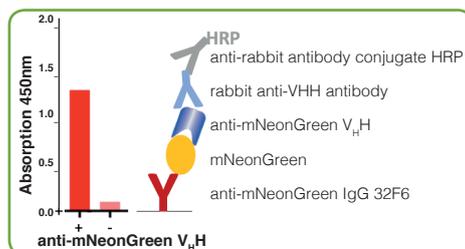
Immunostaining of HeLa cells transiently expressing mNeonGreen fused to Actin Chromobody (green) with 32F6 antibodies (red). Merge image shows overlay of green and red channels and DAPI (blue). Scale bar, 10µm.

### Western Blot (WB)



Western blot analysis of cell extract from HEK293T cells transiently expressing mNeonGreen-beta-Actin (68.7 kDa).

### ELISA



HRP signal is detected as normalized absorption in presence (+, strong signal) and absence (-, faint signal) of anti-mNeonGreen V<sub>H</sub>H. Result shows the applicability of this antibody pair for ELISA measurements.

### Order information

Product name	Size	Code
	10 rxns	nta-10
	20 rxns	nta-20
mNeonGreen-Trap A	100 rxns	nta-100
▶ anti-mNeonGreen V <sub>H</sub> H coupled to agarose beads	200 rxns	nta-200
	400 rxns	nta-400
mNeonGreen-Trap A Kit		
▶ mNeonGreen-Trap A	20 rxns	ntak-20
▶ incl. lysis, wash and elution buffers		
	10 rxns	ntma-10
mNeonGreen-Trap MA	20 rxns	ntma-20
▶ anti-mNeonGreen V <sub>H</sub> H coupled to magnetic agarose beads	100 rxns	ntma-100
	200 rxns	ntma-200
	400 rxns	ntma-400
mNeonGreen-Trap MA Kit		
▶ mNeonGreen-Trap MA	20 rxns	ntmak-20
▶ incl. lysis, wash and elution buffers		
	10 units	sct-10
Spin columns	20 units	sct-20
	50 units	sct-50
Binding control		
▶ agarose beads	20 rxns	bab-20
Binding control		
▶ magnetic agarose beads	20 rxns	bmab-20
anti-mNeonGreen V <sub>H</sub> H, mNeonGreen binding protein	250µg	nt-250
▶ purified protein		
anti-mNeonGreen antibody [32F6]	20µl	32f6-20
▶ mouse monoclonal IgG2a	100µl	32f6-100

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