# GFP-Trap® for Immunoprecipitation

Effective pulldown of GFP-fusion proteins for consistent results

- No heavy & light antibody chains, short incubation (5-30 min)
- Extraordinary binding, also under harsh conditions
- Very high affinity ( $K_n=1$  pM) to bind even low abundant proteins
- ▶ Reliable gold standard with more than 1800 publications

### **GFP-Trap**

The ChromoTek GFP-Trap is the gold standard for fast, reliable and effective one-step immunoprecipitation of GFP-fusion proteins and their interacting factors from cell extracts or organelles.

# **Applications**

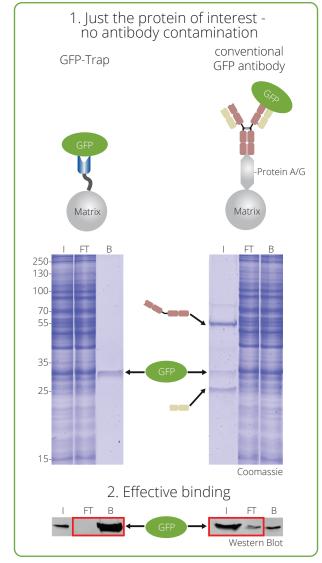
- Immunoprecipitation (IP) / Co-IP
- Mass spectrometry (MS)
- Enzyme activity measurements
- ChIP, RIP, iCLIP analysis

#### Extraordinary stable & reliable binding

- Dissociation constant K<sub>D</sub> of 1 pM
- Stable up to 80°C, 1 mM DTT, 4 M Guanidinium·HCl
  8 M Urea, 2 M NaCl, 2% Nonidet P40 Substitute, 1% SDS, 1% Triton TM X-100, 30% Glycerol, 0.2 mM TCEP
- Fulfills highest requirements for antibody validation
- Structure and function are characterized

### Recognized GFP derivatives

- AcGFP, Clover, eGFP, Emerald, GFP, GFP5, GFP Envy, GFP, S65T, mGFP, mPhluorin, PA-GFP, Superfolder GFP, TagGFP, TagGFP2, monomeric eGFP K206A
- CFP
- YFP, Citrine, eCitrine, eYFP, Venus, Ypet
- BFP



Immunoprecipitations of GFP: Input (I), non-bound (FT) and bound (B) fraction

GFP-Trap® is a registered trademark of ChromoTek GmbH.

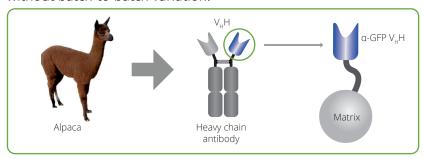


#### Matrices

We offer the GFP-Trap coupled to agarose beads, magnetic agarose beads, or Dynabeads™.

# Technology

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



GFP-Trap: anti-GFP V, H coupled to matrix for immediate use

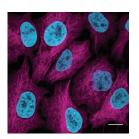
### Immunofluorescence & Western blotting: anti-GFP antibody

Highly sensitive rabbit polyclonal antibody [PABG1]

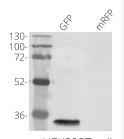
The antibody PABG1 is validated for immunofluorescence and Western blotting. The antibody recognizes green fluorescent proteins such as wtGFP, eGFP, tagGFP, YFP, CFP, or pHluorin. PABG1 can be detected with ChromoTek's alpaca anti-rabbit IgG Nano-Secondaries.

Highly specific rat monoclonal antibody [3H9]

The anti-GFP antibody [3H9] is validated for Western blotting. The antibody recognizes fluorescent proteins such as eGFP, wtGFP, YFP, or CFP and has been independently validated by the Moores Cancer Center, UC San Diego.



HeLa cells all stained with PABG1 + Nanosecondary srb AF647-1



HEK293T cell extract expressing GFP or RFP

# Products (for research only)

| Product name   | Size                     | Code       |
|--|--------------------------|------------|
| GFP-Trap Agarose<br>▶ coupled to agarose<br>beads  | 10 rxns (250µl resin)    | gta-10     |
|  | 20 rxns (500µl resin)    | gta-20     |
|  | 100 rxns (2.5ml resin)   | gta-100    |
| GFP-Trap Agarose Kit<br>► GFP-Trap Agarose<br>► incl. lysis, wash and<br>elution buffers                         | 20 rxns (500μl resin)    | gtak-20    |
| GFP-Trap Magnetic<br>Agarose<br>► coupled to magnetic<br>agarose beads   | 10 rxns (250µl resin)    | gtma-10    |
|  | 20 rxns (500µl resin)    | gtma-20    |
|  | 100 rxns (2.5ml resin)   | gtma-100   |
| GFP-Trap Magnetic<br>Agarose Kit<br>▶ GFP-Trap Magnetic<br>Agarose<br>▶ incl. lysis, wash and<br>elution buffers | 20 rxns (500μl resin)    | gtmak-20   |
| GFP-Trap Dynabeads<br>▶ coupled to Dynabeads   | 10 rxns (250µl resin)    | gtd-10     |
|  | 20 rxns (500µl resin)    | gtd-20     |
|  | 100 rxns (2.5ml resin)   | gtd-100    |
| GFP-Trap Dynabeads Kit<br>► GFP-Trap Dynabeads<br>► incl. lysis, wash and<br>elution buffers                     | 20 rxns (500μl resin)    | gtdk-20    |
| iST GFP-TrapKit for IP/MS  | 8 rxns (plus 2 controls) | gtak-iST-8 |
| Binding control Agarose  | 20 rxns (500µl resin)    | bab-20     |
| Binding control Magnetic<br>Agarose  | 20 rxns (500µl resin)    | bmab-20    |
| GFP antibody [PABG1]<br>▶rabbit polyclonal   | 20 μΙ                    | pabg1-20   |
|  | 100 μΙ                   | pabg1-100  |
| GFP antibody [3H9]<br>▶rat monoclonal  | 20µl                     | 3h9-20     |
|  | 100µl                    | 3h9-100    |
|  |                          |            |

#### Order information

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