

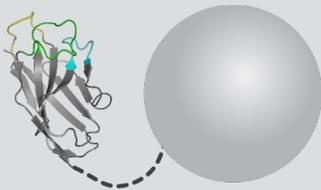
▶ **GST-Trap**
▶ **GST-Antibody**



The GST Toolbox

Fusion of proteins to Glutathione S-Transferase (GST) of *Schistosoma japonicum* is a common technique to increase solubility and expression level of a protein. Furthermore, GST-tagged fusion proteins are often used in protein-protein interaction studies. Both approaches require highly specific tools to isolate and detect GST fusion proteins.

ChromoTek now offers GST-Trap and a rat monoclonal GST antibody for powerful biochemical and Western Blot studies.



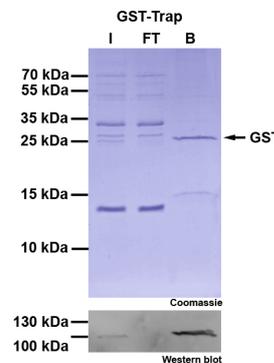
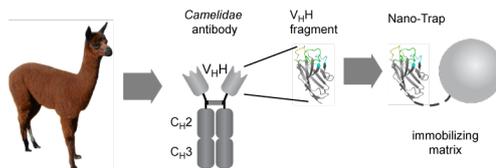
GST-Trap features at a glance:

- ▶ Robust and versatile tool for biochemical analyses of GST-fusion proteins
- ▶ Short incubation times (5 – 30 min)
- ▶ Low unspecific binding
- ▶ Quantitative isolation of fusion proteins and transiently bound factors from cell extracts or organelles
- ▶ No contaminating heavy and light chains of conventional antibodies

Technology

Antibodies - extremely powerful tools in biomedical research - are large complex molecules (~ 150 kDa) consisting of two heavy and two light chains. Due to their complex structure, the use of antibodies is often limited and hindered by batch-to-batch variations.

Camelidae (camels, dromedaries, llamas and alpacas) possess functional antibodies devoid of light chains, so-called heavy chain antibodies (hcAbs). hcAbs recognize and bind their antigens via a single variable domain (V_HH). These V_HH domains are the smallest intact antigen binding fragments (~ 13 kDa).



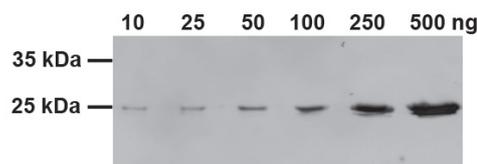
Immunoprecipitations (IP) of GST from protein extracts of GST-expressing *E.coli* cells. Input (I), non-bound (FT) and bound (B) fractions were separated by SDS-PAGE followed by Coomassie staining and Western Blotting.

Use the GST-Trap for a multitude of biochemical analyses e.g.

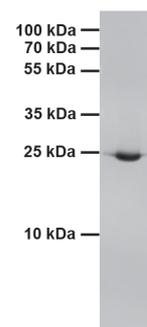
- Immunoprecipitation (IP) / Co-IP
- Mass spectroscopy
- Enzyme activity measurements

GST antibody at a glance:

- ▶ Highly specific monoclonal antibody
- ▶ Applicable in Western Blot analysis



Western Blot Analysis of purified GST: 10, 25, 50, 100, 250, 500ng GST, detected with ChromoTek's GST antibody used in 1:500 dilution, incubated overnight. 2. Antibody: anti-rat 647



Protein lysate of *E.coli* cells expressing GST was separated by SDS-PAGE and analyzed by Western blot using GST antibody 6G9 (1:500). GST antibody 6G9 is highly specific for GST and shows no cross reactivity to other *E.coli* proteins.

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▶ GST-Trap

GST-Trap is available covalently coupled to:

Magnetic particles



GST-Trap_M

stm-20	20 reactions (500 µl resin)
stm-100	100 reactions (2.5 ml resin)
stm-200	200 reactions (5 ml resin)
stm-400	400 reactions (10 ml resin)

As uncoupled, purified protein

st-250	(250µg)
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GST-Trap_M Kit

Kit including lysis, wash and elution buffers

stmk-20	20 reactions (500 µl resin)
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▶ GST Antibody

GST Antibody



GST Antibody

Hybridoma supernatant.

6g9

100µl