

Bioprocess assays



GST and 6HIS tag check kits
Human MAb screening kit

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Cisbio is committed to providing solutions to increase the speed and accuracy of industrial analysis. HTRF® is a highly effective tool for monitoring industrial processes such as protein or antibody engineering and production. HTRF® assays can measure a wide array of components, peptides, proteins or organic molecules.

This section presents three kits commonly used for industrial analysis which measure human antibodies or tagged fusion proteins. These kits can be used to quantify antibodies or tagged proteins precisely, or to screen positive clones during the selection process. If we do not offer a ready-to-use kit or reagent for your bioprocess, our custom labeling and assay development services are available. Most ELISA assays used in the field of bioprocess can be converted to HTRF® assays providing simplified protocols, increased throughput and quality results. We deliver reagents in bulk and offer the consistent batch to batch quality demanded for long term screening or production processes.

Learn more about our assay development offer on page 71.

GST and 6HIS tag check kits

For detecting and measuring all GST and 6HIS tagged proteins.



Description

The production of fusion proteins often not only raises the issue of their structural integrity after isolation, but also of the accessibility of the associated tag. GST and 6HIS check kits are simple tools for assessing tagged proteins during production processes and drug discovery.

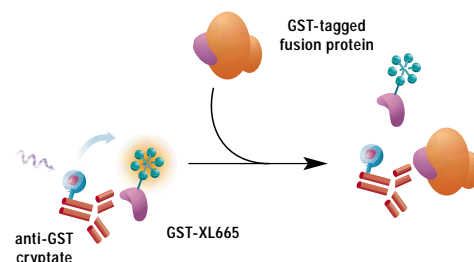
Features

- Immuno-competition formats based on specific 6HIS or GST antibodies (also offered in the HTRF® toolbox, see page 54)
- One single-step incubation for 2 hours at room temperature
- Detection limit: 1 ng/mL on average
- S/B=15 in 96- or 384-well plates

Assay principle:

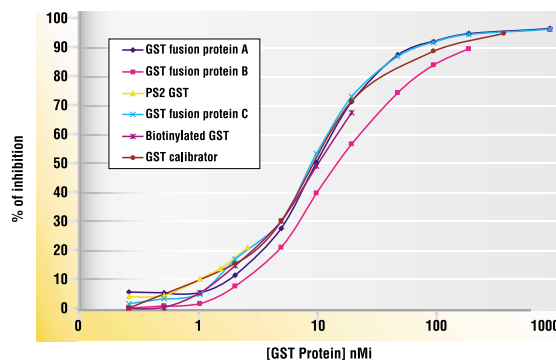
The GST and 6HIS check kits are competitive immunoassays that use cryptate-labeled anti-tag antibodies and XL665-labeled tag. The cryptate-labeled anti-tag antibodies are also offered as individual items in the HTRF® toolbox (see page 54). The assay can be run in entirely in the same microplate, and requires a single two hour incubation. Because of the ratiometric measurement of HTRF® technology, tagged proteins can be detected accurately in a variety of buffers and media.

The graph below shows the dose response curves of different GST fusion proteins obtained when using the GST check kit.



Ordering information

Designation	Size	Cat#
6HIS-tag check kit	1,000 tests	62HISPEB
GST-tag check kit	1,000 tests	62GSTPEB

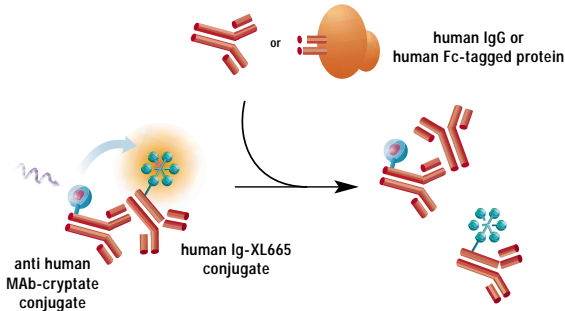


THE ADVANTAGES

- A fast and simple HTRF® protocol makes it possible to measure GST or 6HIS tagged proteins at each production or purification step. These kits can be calibrated using the appropriate protein, making the assay very accurate and compatible with the SOPs used in industrial processes.
- In drug discovery, 6HIS and GST check kits are useful after HTS to eliminate false positive compounds that can inhibit the binding of detecting reagents (anti 6HIS or GST antibodies onto the target protein). These compounds will show strong inhibition in the check kit and can thus be identified as false positives.
- It is important to point out that the 6HIS check kit is a very useful tool to find out if a tag is accessible to antibodies and to predict the possibility of purifying the protein using a Nickel column. If a 6HIS fusion protein is not detected using our check kit, then the tag is inaccessible and not available for purification or other binding purposes.

Human MAb screening kit

Quantitative measurement of human IgGs or human Fc-tagged proteins.



Description

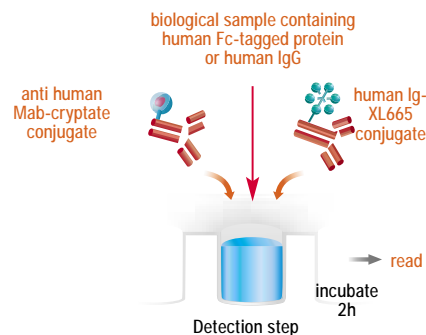
Drug discovery and bioprocess often require the quantification of human IgGs or Fc fragments and tagged proteins. The successful production of human-Fc tagged chimeras and humanized monoclonal antibodies has raised considerable interest in their potential for therapeutic uses. HTRF[®] technology is easily miniaturized and highly amenable to automation, thus allowing more rapid and accurate IgG detection. The introduction of our HTRF[®]-based Human MAb screening kit offers new technical opportunities for high throughput and robust quality control.

Features

- IgG quantification in a variety of biological materials
- Competitive immunoassay involving an anti-human Fc cryptate conjugate
- 2 hour or overnight incubation at room temperature
- Detection limit: 5.5 ng/mL
- Working range: 5.5 to 4,000 ng/mL
- Easily adaptable to 384-well plates
- S/B=11 in 96- or 384-well plates
- Specificity: subclasses IgG 1, IgG 2, IgG 3 and IgG 4

Assay procedure

The kit has been developed to measure human IgG or Fc fragment in a range of biological materials.



Ordering information

Designation	Size	Cat#
Human MAb screening kit	1,000 tests	62HFCPEB
Human MAb screening kit	20,000 tests	62HFCPEC

THE ADVANTAGES

- Our Human MAb screening kit is a versatile tool that offers researchers an alternative to the traditional ELISA assay format:
 - In bioprocess, for human antibody or human Fc tagged protein quantification.
 - In drug discovery, for the screening of humanized antibodies.

