



## CSA: Simian TB

### Serological screening for improved colony health management.

Nonhuman primates (NHPs) in captivity are regularly screened for *M. tuberculosis* infection, both as part of transport associated quarantine and for routine colony health maintenance programs. Despite measures employed to prevent exposure, infections continue to occur even in closed colonies. The tuberculin skin test (TST) is the required screening method to identify animals with acute or latent *M. tuberculosis* infection. However, the TST screening method has been insufficient to identify infected animals reflected by TST negative test results in animals later identified with *M. tuberculosis* infection. Because of the low sensitivity of the TST, additional testing methods like the CSA: Simian TB Assay should be incorporated into your TB screening routine to reduce the risk of TB in nonhuman primates used in research.

### Key Benefits

**Rapid:** Screen samples for antibodies to *M. tuberculosis* in about 2.5 hours

**Affordable:** Significant cost savings over outsourced testing

**Small sample volumes:** Uses 5  $\mu$ l of serum per assay

**Reliable:** Highly sensitive and specific assay validated by several National Primate Research Centers

**Easy:** Assay technique as easy as an ELISA

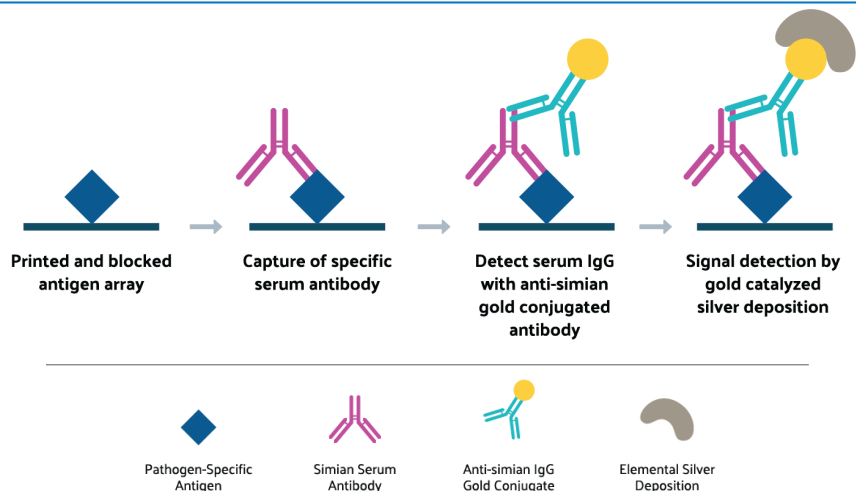
**Affordable Analyzer:** All AIM assays are compatible with the AQ 1000 analyzers, a low-cost and rapid scanning system.

US Patent No. 9,404,923 "Mycobacterium tuberculosis specific peptides for detection of infection or immunization in non-human primates"

### How It Works

#### One sample, multiple results.

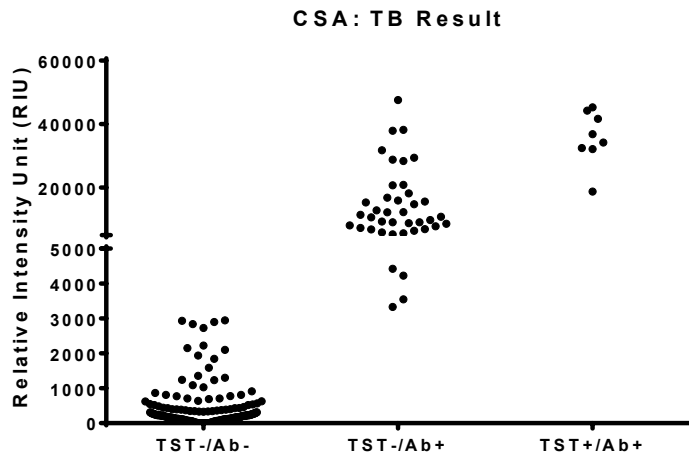
**Basic Assay Workflow for CSA Assays.** Diluted samples are incubated with antigen spotted assay plates with one sample per well. Unbound serum IgG are washed off, and bound IgG detected with anti-IgG gold conjugate. Immune complexes are visualized with the SilverQuant reagents.



CSA: Simian TB kits provide sensitive and reliable screening tools for your SPF colony. The CSA method identifies animals that have been previously exposed to an infectious agent by detecting serum antibodies to pathogens like *M. tuberculosis*. Results are quantified with the AQ 1000 instrument within minutes.

### To Order:

Please email [orders@intuitivebio.com](mailto:orders@intuitivebio.com) for pricing and availability or call (608) 561-8730. For questions about the CSA: Simian kits or serology testing services email [info@intuitivebio.com](mailto:info@intuitivebio.com) or call and ask to speak with Dr. Kimberly Luke.



Results from closed colonies with TST positive animals. The CSA: Simian TB assay identified TST positive animals with confirmed TB disease. Several TST negative animals found antibody positive here were later confirmed TB positive or were suspect due to proximity to confirmed TB cases.

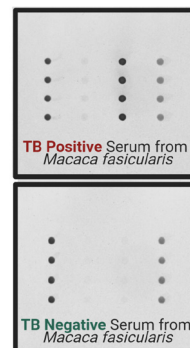
The CSA: Simian TB test should be considered a supplementary testing method. For imported animals repeat TST testing in conjunction with the CSA: Simian TB assay better identifies suspect animals prior to shipment and during quarantine.

## CSA: Simian Kits

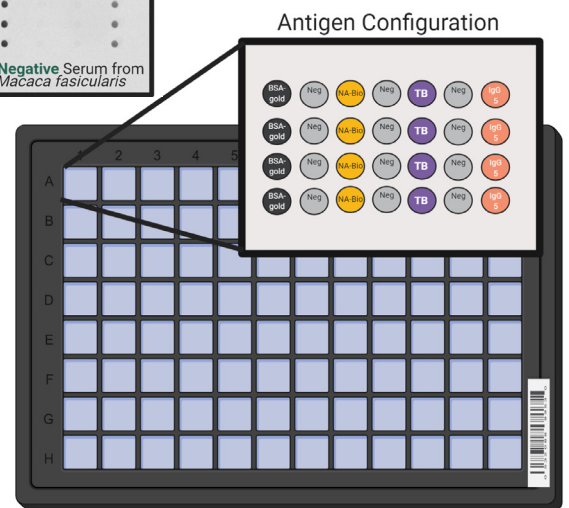
Each CSA: Simian TB kit comes with one 96-well assay plate. Each plate has 96 identical wells as shown in the diagram to the right. Each well has 4 replicate spots of internal assay controls, negative controls, reagent controls, and the multiplex TB antigen spotted in each well. All buffers and reagents required to run up to 94 samples per kit including Positive and Negative control serum are included. Reagent only kits are available upon request for partial plate usage.

Completed assays are analyzed on the AQ 1000 reader. A report is generated providing a customized spreadsheet compatible with most Laboratory Information Systems (LIMS). A Negative or Positive result is reported for each sample.

All CSA: Simian kits are compatible with the AQ 1000 reader. Analysis template and customized reports are provided with any instrument purchase. For more information about the AQ 1000 scanner, please visit <http://intuitivebio.com/item/aq-1000/>



Each well contains 4 spots for each control or TB antigen. The top image shows TB positive results, and the bottom shows a TB negative result.



CSA: Simian TB Array Layout

Part No.	Product Name	Description
12-1212	CSA: Simian Panel A Kit	Tests up to 92 samples per kit for SRV, STLV, SIV, herpes B virus, and measles.
12-1213	CSA: Simian Panel E Kit	Tests up to 92 samples per kit for SRV, STLV, SIV, herpes B virus, measles, CMV, LCV, RRV, and SFV.
12-1215	CSA: Simian TB Kit	Tests up to 92 samples per kit for <i>M. tuberculosis</i> .
Custom	Custom CSA Kit	Tests up to 92 samples per kit for a custom antigen panel.

## CSA: Simian TB Serology Services

Serum samples shipped frozen or cold overnight can be tested immediately with results within 3 business days. Sample Requisition Forms need to be completed prior to shipping. For international customers, please call ahead to arrange import/export CITES permit. Please call or email for pricing for sample testing service. Submission forms and shipping instructions can be downloaded from our website at <https://goo.gl/Ny23aq>.