

# TRANSIA<sup>®</sup>

Staphylococcal Enterotoxins

*Widest offering in purification/detection/confirmation*  
*European reference method*  
*Unique low limit of detection*  
*High specificity*



# TRANSIA<sup>®</sup>

## Staphylococcal Enterotoxins

Staphylococcal foodborne intoxication is a common cause of bacterial foodborne outbreaks in many countries. This foodborne intoxication results from ingestion of staphylococcal enterotoxins (SET) produced by toxigenic strains of *Staphylococcus aureus*. The *S. aureus* can be easily destroyed by heat treatment. However, SET has almost total resistance to dehydration, proteolytic enzymes and heat treatment. Traditional detection methods are costly, tedious and lack the level of sensitivity required for industrial use.

By using the state-of-the-art biotechnology and unique experience within Raisio Diagnostics you can benefit from the widest range of SET-methods in the marketplace for a complete analysis from purification and/or concentration of the five different serological groups (A-E) to identification of each group.

As recognised excellence in performance, EU Community Reference Laboratory for milk and milk products (CRL) is recommending TRANSIA PLATE SET for official testing of milk and dairy products throughout Europe.

## TRANSIA<sup>®</sup> IAC

### Staphylococcal Enterotoxins

These immunoaffinity columns are aimed for the purification/concentration of the five different serological groups (A-E) from various foods prior to detection with other TRANSIA SET methods.

#### TECHNICAL ADVANTAGES

- Unique sensitivity – detects down to 0.1 ng S. enterotoxins/gram sample in combination with TRANSIA PLATE SET, TRANSIA PLATE SET Plus and TRANSIA ID SET
- Specific – no cross-reaction with other non-staphylococcal toxins
- “All inclusive” – includes ready-to-use immunoaffinity columns and all the required reagents

#### FINANCIAL ADVANTAGES

- Faster than the common dialysis step – only two hours with TRANSIA IAC SET
- Re-usable for negative samples

#### ENVIRONMENTAL ADVANTAGES

- Minimal consumption of plastics
- Low waste volumes

## TRANSIA<sup>®</sup> TUBE

### Staphylococcal Enterotoxins

After simple and rapid extraction in water, the sample is used directly in the immunoenzymatic reaction. The unique combination of monoclonal and polyclonal antibodies makes the test highly specific and sensitive. The flexible tube format enables testing of SET in small series and with limited laboratory resources.

#### TECHNICAL ADVANTAGES

- Sensitive – detects down to 0.5 ng S. enterotoxins/gram
- Specific – detects S. enterotoxin A, B, C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, D and E
- “All inclusive” – includes ready-to-use tubes and all the required reagents
- Flexible – single test system

#### FINANCIAL ADVANTAGES

- Results obtained in 90 minutes
- Less labour time per test compared with conventional methods
- No special equipment required
- No need for confirmation tests

#### ENVIRONMENTAL ADVANTAGES

- Minimal consumption of plastics
- Low waste volumes



## TRANSIA® PLATE

### Staphylococcal Enterotoxins

After simple and rapid extraction in water, the sample is used directly in the immunoenzymatic reaction. The unique combination of monoclonal and polyclonal antibodies makes this method highly specific and sensitive.

#### TECHNICAL ADVANTAGES

- Sensitive – detects down to 0.25 ng S. enterotoxins/gram sample
- Specific – detects S. enterotoxin A, B, C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, D and E
- Ready-to-use reagents with long shelf-life
- Flexible format with divisible strips

#### FINANCIAL ADVANTAGES

- Results obtained in less than 2 hours
- Less labour time per test compared with conventional methods
- No need for confirmation tests
- Single and high throughput testing

#### ENVIRONMENTAL ADVANTAGES

- Minimal consumption of plastics
- Low waste volumes

#### SPECIAL APPLICATIONS

- Walk-away comfort with automated screening by using TRANSIA Elisamatic II or T4U

#### VALIDATED PERFORMANCE

- Recognised proven performance by EU Community Reference Laboratory for milk and milk products (CRL)

## TRANSIA® PLATE

### Staphylococcal Enterotoxins Plus

This enhanced method offers easier and faster sample preparation of milk and dairy products as well as culture supernatants. The unique combination of monoclonal and polyclonal antibodies makes this method highly specific and sensitive.

#### TECHNICAL ADVANTAGES

- Simplified and faster sample preparation for certain matrices
- Sensitive – detects down to 0.25 ng S. enterotoxins/gram sample
- Specific – detects S. enterotoxin A, B, C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, D and E
- Ready-to-use reagents with long shelf-life
- Flexible format with divisible strips

#### FINANCIAL ADVANTAGES

- Results obtained in less than 2 hours
- Less labour time per test compared with conventional methods
- No need for confirmation tests
- Single and high throughput testing

#### ENVIRONMENTAL ADVANTAGES

- Minimal consumption of plastics
- Low waste volumes

#### SPECIAL APPLICATIONS

- Walk-away comfort with automated screening by using TRANSIA Elisamatic II or T4U



# TRANSIA<sup>®</sup>

## Staphylococcal Enterotoxins

### TRANSIA<sup>®</sup> ID

#### Staphylococcal Enterotoxins

This method is aimed for the detection and differentiation of the five different serological groups (A-E) of staphylococcal enterotoxins in food samples and cultural supernatants.

#### TECHNICAL ADVANTAGES

- Sensitive – detects down to 20-60 pg/mL of each serological group (A-E)
- Specific – detects *S. enterotoxin* A, B, C, D and E
- “All inclusive” – includes ready-to-use tubes and all the required reagents
- Flexible – single test system

#### FINANCIAL ADVANTAGES

- Results obtained in less than 2 hours
- Less labour time per test compared with conventional methods
- No need for confirmation tests
- Single and high throughput testing

#### ENVIRONMENTAL ADVANTAGES

- Minimal consumption of plastics
- Low waste volumes

#### TEST MATRICES

- Milk and dairy products
- Meat, poultry and eggs
- Seafood and other foods
- Feed products
- Bacterial cultures

#### Staphylococcal Enterotoxins

*Staphylococcus aureus* is a Gram-positive, coccus bacterium. Some strains are capable of producing highly heat-stable proteins, so called enterotoxins that cause staphylococcal food poisoning in humans and in some cases even toxic shock syndrome (TSS).

In many countries Staphylococcal enterotoxins is considered to be the second or third most common source of outbreaks of food poisoning.

Foods that require considerable handling during preparation and that are kept at slightly elevated temperatures after preparation are frequently involved in staphylococcal food poisoning. Foods that are often involved in staphylococcal food poisoning include meat and poultry, egg, mixed salads, cream containing pastries and pies, milk and dairy products.

#### ORDERING INFORMATION:

ST724B TRANSIA TUBE SET, 20 tubes  
ST0796 TRANSIA PLATE SET, 1 plate, divisible strips  
ST0777 TRANSIA PLATE SET Plus, 1 plate, divisible strips  
ST0705 TRANSIA IAC SET, 5 pcs  
ST0712 TRANSIA ID SET, 1 plate, divisible strips  
AK0220 TRANSIA Additive Raw Meat Extraction  
AK0224 TRANSIA Additive Rabbit Serum

## RAISIO

DIAGNOSTICS

[www.raisiodiagnostics.com](http://www.raisiodiagnostics.com)