ESTROM Widal
(Stainedd Salmonella Antigens)

ANGSTROM BIOTECH PVT. LTD

This reagent kit is used for detection of specific antibodies produced in Serum as a result of stimulation by specific antigen of Salmonella (group).

PRINCIPLE:
The immunospecific antibodies present in serum of infected host readily react with '0' & 'H' antigen present in the killed bacterial suspension of Salmonella & results in agglutination or clumps on the slide.

CLINICAL SIGNIFICANCE :
The disease like enteric fever or typhoid fever shows symptoms generally by very high consistent fever, loss of appetite, transitory bacterimia, round or oval shaped ulcer with smooth peritoneal surface of payer's patches and solitary lymphoid follicles of ileum etc. The disease is caused by organism salmonella typhosa. This micro-organism produces two types of antigen, '0' antigens on the cell wall & 'H' antigen on its flagella, in response to stimulation, host immune system produces antibodies to counteract the effect of corresponding antigen. The one more species of salmonella S. paratyphi A or paratyphi B causes paratyphoid fever that is characterized by milder course of disease. Also, this organism produces somatic '0' & flagellar antigen which is termed as A(H) & B(H) respectively.

Similar antigenic properties also observed in Salmonella sµp. that causes food poisonings & fetal infection.

SAMPLE COLLECTION AND STORAGE:
- Fresh clear, serum sample preferred.
- Sample should be stored at 2-8°C away from direct light.

PRECAUTION:
- Estrom reagent kit is for invitro diagnostic use only.
- All the reagents should be brought to room temperature before use.
- Shake antigen vial well before use & also include positive & negative control sera for greater proficiency in interpretation of result.
- Patient history should be taken into account before giving the final result.
- Empty the dropper after use in order to avoid the possibilities of false positive results.
- In a non inoculated person the titre as high as 1:80 between 7th or 10th day of fever is of diagnostic value & the same titre increases gradually during subsequent period.
- In an inoculated person the question of anamnestic response should always be born in mind and 'H' should not be taken into account for the purpose of diagnosis unless there is rising titre of 'H' in subsequent period.

KIT CONTENTS:

REAGENTS:
- Reagent 1 : S. typhi '0' Antigen
- Reagent 2 : S. typhi H Antigen
- Reagent 3 : S. paratyphi 'A(H)' Antigen
- Reagent 4 : S. paratyphi 'B(H)' Antigen
- Reagent 5 : Widal Positive Control

ACCESSORIES REQUIRED:
- Glass slide.

REAGENT STORAGE AND STABILITY:
- All the reagents are stable till expiry date mentioned on the label when stored at 2-8°C away from direct light.

PROCEDURE :

1. RAPID SLIDE TEST (WIDAL SCREENING TEST)

- Clean the glass slide & wipe it.
- Put one drop of non-diluted serum in each on the first four circles (1 - 4)
- Then, add one drop of antigen 0, H, A(H) B(H) in the circle 1, 2, 3, 4 respectively.
- Mix the contents of each circle with separate sticks. Spread to fill the whole circle area .
- Rock the slide for one minute & observe for agglutination.
- If agglutination occurs within one minute then proceed for quantitative estimation.

2. QUANTITATIVE SLIDE TEST

- Clean the glass slide provided in the kit & proceed as follows.

Circle	Serum Volume	Approximate Antigen Drop		Titrate
1	0.08	1Drop	Mix and rotate For one minute and observe agglitination	1:20
2	0.04	1Drop		1:40
3	0.02	1Drop		1:80
4	0.01	1Drop		1:160
5	0.005	1Drop		1:320

Repeat above procedure for visible agglutination. In rapid screening test highest dilution observed which gives visible agglutination is the Titre value.

RESULT INTERPRETATION:

A. RAPID SLIDE TEST
- Flocculating agglutination in case of H or A(H) or B(H) & Granular agglutination in case '0' indicates the positive reaction.

B. QUANTITATIVE SLIDE TEST
- A positive reaction indicated by a diagnostic titre of 1:80.

LIMITATIONS:

Positive result observed in rapid slide test or quantitative slide test must be confirmed by other tube test and microbiological investigations.

BIBLIOGRAPHY:

- Protell r. et. al (1971) Lancet, 11, 330
- Felix A. (1942) Brit Med. Jr. II, 597.

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	Attention,see instructions for use		Consult Instructions For Use
IVD	For in vitro diagnostic use only	REF	Catalog #
2°C 8°C	Store between 2-8°C	LOT	Lot Number
	Do not use if package is damaged		Date of Manufacturing
	Manufacturer		Use by