

TM 2401 – TRYPTOSE AGAR, W/ THIAMINE HCL

INTENDED USE

For the isolation, cultivation and differentiation of fastidious microorganisms in an infusion free medium.

PRODUCT SUMMARY AND EXPLANATION

Huddleson used Tryptose media for the isolation of *Brucella* species from man. Tryptose containing media, rather than the conventionally used meat infusion media have been used for the enumeration and isolation of *Brucella* species. Addition of thiamine to tryptose media enhanced the recovery of *Brucella* species especially *Brucella suis*. These media can be used as general purpose media for cultivation of wide variety of organisms. It can also be supplemented with defibrinated blood (sheep, horse) to prepare blood agar for the isolation of fastidious organisms like *Brucella*. Tryptose Agar with thiamine HCl is recommended by APHA and Diagnostic Procedures and Reagents for the isolation and cultivation of *Brucella* species and also Streptococci, meningococci, pneumococci and other pathogenic bacteria.

COMPOSITION

Ingredients	Gms / Ltr
Tryptose	20.000
Dextrose	1.000
Sodium chloride	5.000
Thiamine hydrochloride	0.005
Agar	15.000

PRINCIPLE

Dextrose is the source of energy. Tryptose serves as nitrogen source while sodium chloride maintains osmotic equilibrium. Blood Agar may be prepared by adding 5%v/v sterile defibrinated blood to molten sterile Tryptose Agar w/ thiamine hydrochloride at 50°C.

INSTRUCTION FOR USE

- Suspend 41 grams in 1000 ml distilled water.
- · Heat to boiling to dissolve the media completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- For blood media, aseptically add 5% v/v sterile defibrinated blood.
- Mix well and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Yellow coloured clear to slightly opalescent gel. After addition of 5% v/v sterile

defibrinated blood: Cherry red coloured opaque gel forms in Petri plates.

pH (at 25°C) : 7.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
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Brucella suis	4314	50-100	Good- luxuriant	>=50%	35-37°C	48-72 Hours
Streptococcus pneumoniae	6303	50-100	Good- luxuriant	>=50%	35-37°C	48-72 Hours
Streptococcus pyogenes	19615	50-100	Good- luxuriant	>=50%	35-37°C	48-72 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

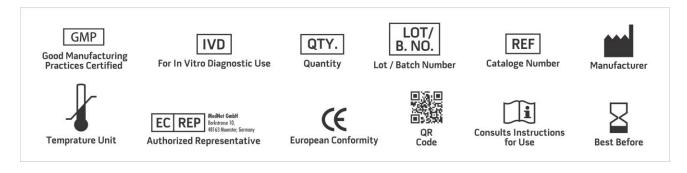
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- 1. Huddleson I. F., 1943, Brucellosis in man and animals, rev., Ed., The Commonwealth Fund, New York, N.Y.
- 2.Ruiz Castañeda M., 1947, Proc. Soc. Exp. Biol. Med., 64:114.
- 3. Huddleson I. F., 1939, Brucellosis in Man and Animals, Oxford University Press, Oxford, England. 4. McCullough W. G., Mills R. L., Herbst E. J., Roessler W. J. and Brewer C. R., 1947, J. Bacteriol., 53:5.
- 5.Atlas R. M., 2004, Handbook of Microbiological Media, Lawrence C. Parks, (Ed.), 3rd Edition, CRC Press. 6.Standard Methods for the Microbiological Examination of Dairy Products, 9th Ed., 1948, APHA Inc., New York.
- $7. Diagnostic\ Procedures\ and\ Reagentsm,\ 1950,\ 3rd\ Edition,\ APHA,\ New\ York.$
- 8. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019





