

Indications

Uranotest Dermatophytes is a culture medium which makes it possible to diagnose dermatophytosis caused by fungi of the genera *Microsporum*, *Trichophyton*, and *Epidermophyton* in dogs, cats, rodents, horses, pigs and cattle.

Principle of the technique

Mycoses are infections caused by fungal dermatophytes that affect the keratinized tissue of the skin, nails, hair and corneal stratum.

Uranotest Dermatophytes is based on a change in the medium from yellow to red in colour when there is a growth of colonies of the aforementioned fungi. The colour change occurs from the second day after incubation onwards when the dish is incubated at 28° C. At room temperature, the colour change occurs within 12 days at the latest. After this period of time, any colour change should not be considered as positive.

In contrast to other tube-type dermatophyte tests, Uranotest Dermatophytes is in the shape of a dish which aids the process of seeding the sample and allows the colonies to grow without overlapping each other, thereby making viewing easier. In this way, it aids identification and allows an easy test sample of the colonies to be taken using a cellophane paper for their re-seeding or observation under a microscope.

Materials supplied

- 4 dishes with a DTM culture medium covered with an aluminium foil.
- 1 bottle with a contrast medium to aid the identification of colonies on observing them under a microscope.
- 1 prospectus with instructions for use.

Precautions

- 1 - For veterinary use only.
- 2 - For optimum results, adhere strictly to the instructions for use.
- 3 - All samples should be handled as if they were potentially infectious and destroyed in accordance with the regulations in force.
- 4 - Do not remove the aluminium foil covering each dish until the moment of use.
- 5 - Do not reuse.
- 6 - Do not use once the expiry date has been passed.

Preservation and stability

Store in a cool dark place.
Do not refrigerate.

Method of use

- 1 - Remove the aluminium foil from the dish.
- 2 - Washing the area of skin affected before obtaining the sample is only indicated in cases of heavy contamination and an excess of scabs. If necessary, use a non-fungicide soap and dry thoroughly with an absorbent material.
- 3 - Obtain a small sample of hairs and scales from the periphery and the centre of the lesion. Broken or brittle hair and those which fluoresce under the Wood Lamp are the best samples.
- 4 - Avoid seeding a large number of hairs and scales in the medium, since this may induce an unnecessary overgrowth of colonies.
- 5 - Place the sample carefully on the dish and fit the plastic lid. The lid has 3 fins to allow air to enter the medium.
- 6 - Make a note of the client's date and time.
- 7 - Place the dish in a incubation oven at 28°C or store it in a place protected from the light and as close as possible to the ideal cultivation temperature of 28°C.
- 8 - From the second day on, examine the dish daily for fungal growth and/or a change in colour.
- 9-Important: the dish should be incubated with the lid facing downwards.

Interpreting the results

Positive result

A positive result occurs when the colour of the culture medium changes from yellow to red. The colour shift usually occurs before there is an initial growth of the colonies or at the same time as they begin to grow. Colonies of dermatophytes are white in colour and have the following appearance:



Appearance of a *Microsporum* colony



Appearance of a *Trichophyton* colony

Negative result

A negative result occurs when there is no colour change in the culture medium. Growth of colonies without colour change may occur (due to saprophytic flora) but these are grey, brown or green in colour and not white as in the case of dermatophytic fungi.

From the 12th day onwards, a colour change may occur in the medium due to the growth of saprophytic fungi, however the colonies are always grey, brown or green and the colour change occurs when there is an abundant growth of colonies. In this case the result must always be considered to be negative.

Results interpretation table

Change of colour	Time period	Colour of the colonies	Interpreting the results
None	After 12 days	No colonies	Negative
None	After 2 days	Brown, grey or greenish colonies	Negative
Yellow to red	Between 2 and 12 days	White colonies	Positive
Yellow to red	After 12 days	Brown, grey or greenish colonies	Negative. The change of colour is due to the growth of saprophyte flora which occurs after the recommended maximum reading time of 12 days.

Supplementary examination under the microscope in order to identify colonies

Although in most cases obtaining a positive result already makes it possible to prescribe an appropriate treatment, the Uranotest Dermatophytes dish has been designed to allow the colonies to be collected using an adhesive tape, so that they can subsequently be observed under a microscope and thus identify the species of dermatophytes that has caused the dermatological lesion.

The clear adhesive tape is laid over the colonies, pressing gently. The sample is transferred to a slide, on which a drop of contrast solution (supplied with the kit) has been previously placed.

Under the microscope, the macroconidias can be observed and identified by performing a differential diagnosis between the different species.