Albert's Stains

(for *In Vitro* Diagnostic use only)

PRODUCT CODE: PL.7129, PL.7130, PL.7131, PL.7132, PL.7133, PL.7134

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INTENDED USE

For the detection and preliminary identification *of Corynebacterium diphtheriae* in prepared slides from clinical specimens.

SUMMARY AND EXPLANATION

Albert's stain was first described in 1920 as a differential stain used to stain the volutin granules, also known as metachromatic or food granules, found in *Corynebacterium diphtheriae.*

PRINCIPLE OF THE TEST

The Albert's stain procedure comprises two stains: Albert's Stain 1 and Albert's Stain 2. Albert's Stain 1 contains Toluidine Blue and Malachite Green, basic dyes with a high affinity for acidic tissue like cytoplasm. When stained with Albert's Stain 1 the volutin granules are stained blue and the cytoplasm is stained blue-green. Albert's Stain 2 stains the blue-stained volutin granules blue-black so they are more visible against the blue-green cytoplasm background.

MATERIALS PROVIDED

Ready to use stains:

-	PL.7129	Albert's Stain 1	500 ml
-	PL.7130	Albert's Stain 1	1000 ml
-	PL.7131	Albert's Stain 1	2000 ml
-	PL.7132	Albert's Stain 2	500 ml
-	PL.7133	Albert's Stain 2	1000 ml
-	PL.7134	Albert's Stain 2	2000 ml

Per 100ml solution:

- Albert's Stain 1 contains 0.15g Toluidine Blue powder and 0.2g Malachite Green powder.
- Albert's Stain 2 contains 0.66g of Iodine.

MATERIALS REQUIRED BUT NOT PROVIDED

- Glass slides
- Inoculating loop
- Immersion oil PL.396
- Microscope

STABILITY AND STORAGE

Albert's Stains 1 and 2 should be stored at 15-25ºC in original containers. Product stored under these conditions will be stable until the expiry date shown on the product label.

PRECAUTIONS

- For *In Vitro* Diagnostic Use only.
- For professional use only.
- Directions should be read and followed carefully.
- Do not use beyond the stated expiration dates.
- Microbial contamination may decrease the accuracy of the staining.
- Safety precautions should be taken in handling, processing and discarding all clinical specimens.
- Samples should be processed in the correct containment level conditions.
- Dispose of all material in accordance with local regulations.

TEST PROCEDURE

1. Prepare a smear on a clean glass slide and allow to air dry.
2. Flood the slide with Albert's Stain 1, and allow to stain for approximately 5 minutes.
3. Drain off the excess stain. Do not rinse the slide with water.
4. Flood the slide with Albert's Stain 2 for approximately 1 minute.
5. Wash the slide with water and air dry.
6. Examine using a microscope.

QUALITY CONTROL PROCEDURE

Internal quality control of the stains must be performed regularly on known reference material.

Recommended Quality Control:
Positive control – *Corynebacterium diphtheriae* NCTC® 11397/ATCC® 27010*
Negative control – A proven negative

INTERPRETATION OF RESULTS

Positive- *Corynebacterium diphtheriae* appear as green rods arranged at angles to each other (resembling letter 'L' or 'V'), along with blue-black metachromatic granules at the poles.
Negative- short nonpathogenic diphtheroids or other organisms will lack the blue-black granules.

LIMITATIONS OF THE PROCEDURE

- Only experienced personnel should carry out the interpretation of stained slides
- Read prepared slides as soon as possible after staining. Failure to do so may affect the results.

REFERENCES

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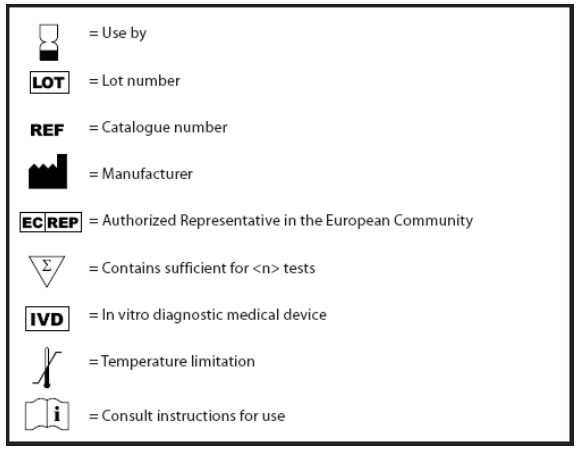

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HAZARDS IDENTIFICATION

Please refer to Safety Data sheets for full text for all hazard and precautionary statements.

	PL.7129 **PL.7130** **PL.7131** **PL.7132** **PL.7133** **PL.7134**	**Classification (EC 1272/2008)** **NC Not Classified.**

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