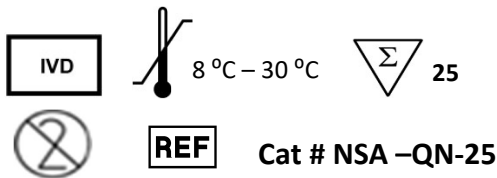




*Rapid one step Quantitative Detection of Vitamin A
in Human Serum*



Cat # NSA –QN-25

INTENDED USE

Test4A is a rapid chromatographic immunoassay for the quantitative detection of Vitamin A levels in human serum.

PRINCIPLE

Test4A is based on the principle of a competitive immunoassay. The assay system utilizes immobilization of analyte-protein conjugate (retinol) on a test line on nitrocellulose membrane. An Anti-vitamin-A monoclonal antibody conjugated to gold nanoparticles is used as the detecting antibody in the assay. The test sample is allowed to react with the detector antibodies, resulting in the vitamin-A molecules getting attached to it. The competitive reaction will be seen between the Vitamin A in sample and Vitamin A on test line. Depending upon the concentration of Vitamin A in serum, there will be varying number of free - antibody-gold conjugate molecule that will bind to analyte-protein conjugate on the test line and will show a colored line in test line zone. A control line is present in the test window to work as procedural

control. The intensity of the test line is inversely proportional to the concentration of vitamin A in serum sample.

MATERIALS PROVIDED

Each package contains:

1. 25 Test4A individually packed test devices in foil pouches
2. 1 Buffer Vial containing Chase Buffer with stabilizers
3. Dilution buffer
4. 1 Package Insert

MATERIALS REQUIRED BUT NOT PROVIDED

- Timer or clock

SPECIMEN PREPARATION

Mix the serum sample thoroughly by gently inverting the tube.

- Dilute serum sample with dilution buffer in ratio 1:1.
- Use 10 µl of diluted serum sample (Repeated freeze thaw of serum sample is not recommended. Bring frozen serum sample to room temperature before use)
- Assay must be performed immediately.

PROCEDURE

1. Remove the cassette from sealed pouch and place it on a hard flat surface with the view window facing up (use the cassette as soon as possible).
2. Using a micropipette, add 10 µl of diluted serum sample directly into the specimen well (marked with Red drop) of the cassette.
3. Add 3 full drops (or 100 µl with pipette drop wise) of Chase Buffer into the square buffer

well of the cassette (Do not move the cassette after addition of buffer).

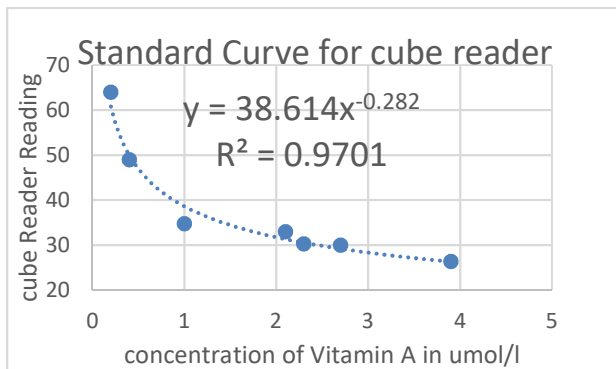
4. Let cassette sit for 10 minutes and immediately read results by the cube reader as explained below. Results may change after the 10 minute mark.

TEST RESULT WITH READER

1. Place the adapter on top of the test device properly. Place the cube reader on top of the adapter correctly.
2. Press the black button on reader, it will display ON.
3. Press the button again and display will read "RFID", Place the Lot Specific RFID card provided on the cube reader with each lot to upload the calibration data.
4. Following a beep signal, "TEST" is displayed.
5. Press the black button, it will display RUN.
6. The Test Result results will display on the screen.
7. The reader will switch off automatically after 50 seconds.

3. Reagents and device must be at room temperature (8 °C – 30 °C).
4. Do not use if test device packaging is open or damaged.
5. Do not use the product beyond expiration date.
6. Control line should always appear in order to consider the test valid.
7. Handle all specimens as potentially infectious. Proper handling and disposal methods should be used according to good laboratory practices.
8. Read test results at 10 minutes as required. Results may deteriorate and may not be consistent after 10 minutes.
9. In order to avoid variable results mix the serum sample thoroughly.
10. A serum sample subjected to repeated freeze thaw cycle, hemolysed, cloudy serum sample may give variable results.

Standard curve using Cube Reader



PRECAUTIONS

1. For in vitro diagnostic use only.
2. The test is designed for use with human serum only.

STORAGE AND STABILITY

The test device should be stored at 8 °C – 30 °C and will be stable until the expiration date stated on the package. The product is humidity sensitive and should be used immediately after being open.

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