**Intended Use:**

This kit is intended for use only as an *in-vitro* assay of animal specimens.

**Methodology**

Each kit contains 10 single radial immunodiffusion test plates for the quantitative determination of a 1 Acid Glycoprotein (AGP) in Feline Serum or other specimens.

**Kit Contents**

1. Test plates for Feline AGP: 10 Test Plates with 10 Wells each. Each kit has a 100 test capacity.
2. Standard Solution A (Feline AGP 2000µg/ml. One vial (0.2ml).
3. Standard Solution B (Feline AGP 500µg/ml. One vial (0.2ml).
4. Graph Paper, semi-logarithmic (2 Sheets).
6. Test Instructions

**Test Principle**

Each test sample thought to contain Feline AGP is placed in an individual test well. As the sample diffuses radially from the well into the agar gel plate, a specific precipitin reaction occurs between Feline AGP and the specific antiserum to Feline AGP incorporated in the gel. A visible precipitin ring is formed.

Since the area within this ring is directly proportional to the concentration of AGP in the test sample, measurement of the ring's diameter allows calculation of that AGP concentration, as compared to the two known standards, Solutions A and B.

**Test Procedure**

(a) Remove plastic cover from test plate.
(b) Use a micro-dispenser 5µl or capillary pipette to apply 5µl of Standard Solution A to one test well. Repeat with 5µl of Standard Solution B to a separately identified well (see "Precautions").
(c) In an identical manner, apply exactly 5µl of each Feline serum sample to separately identified wells. Use one well for each sample.
(d) Firmly secure plate cover.
(e) Maintaining plate in a horizontal position, place in a humidified box at between Room Temperature and 37°C to incubate for 24 to 48 hours before reading test results.

**Evaluation Of Results**

(a) After 24 to 48 hours remove plate from incubator and remove cover from plate.
(b) Invert the plate over a source of illumination, such as a light table or light box, so that the precipitin rings may be clearly viewed from the bottom surface of the plate.
(c) Use the plastic scale provided to measure the external diameter of each precipitin ring to the nearest 0.1mm.
(d) Measure the rings for the Standard Solutions A and B first.
(e) Plot these diameters on the vertical axis of the semi-logarithmic graph paper provided. Show the AGP concentration on the horizontal axis of the graph.
(f) Draw a straight line through points A and B which can be used as a reference curve.
Next, plot the diameters of the precipitin rings for each of the test samples.

From the reference curve, the AGP concentration of each test sample may be calculated. If the test sample has been diluted as for Feline serum, multiply the concentration read from the curve by that dilution factor to obtain the actual concentration in µg/ml.

If no precipitin ring appeared or if the ring was too large in diameter, make an appropriate change in the dilution factor and re-test the sample at a different dilution.

Accuracy Of Test

1. The antisera in the agar gel reacts specifically and exclusively with Feline AGP.
2. Feline AGP concentrations within a range of 100 to 3,000µg/ml may be accurately measured using this test.
3. The test offers superior reproducibility. The coefficient of variation is less than 4% in repeated measurements of identical aliquots of the same test specimen.

Precautions In Testing

(a) To ensure uniformity, the test sample should be well mixed or agitated thoroughly prior to application to the well.
(b) While adding the sample to the well, do not damage the agar or disturb the well.
(c) Wash the micro-syringe with saline after each use.
(d) Remove any residual moisture in the test wells by absorption or by allowing the uncovered plate to dry briefly at room temperature prior to use.
(e) Refrigerator Storage: repeated opening or closing of the door or fluctuations in temperature may result in the condensation of moisture on the gel surface which may cause inaccurate readings.

Shelf Life

Test kits are stable for one year from the date of manufacture when properly stored between 4°C and 10°C. Expiration date is marked on each package.

DO NOT FREEZE.