

Intended Use

For the *in-vitro* diagnostic use to remove visible amounts of turbidity due to lipids in serum.

Clinical Significance

Visible turbidity, due to elevated amounts of lipids, interferes with the accurate determination of analyte concentrations by spectrophotometric/colorimetric methods. CataKlear can help clear lipid interferences from serum samples.

Method Principle

CataKlear is a stable, liquid colloidal nanoparticle dispersion of selectively sized silicone oxides, various surfactants and buffering components. The lipid components in serum are released through the activity of the surfactants and attach to the silicone oxide nano-particles. Upon centrifugation, these lipid-silicone oxide nanoparticles are spun to the bottom of the centrifuge tube, leaving a lipid free layer of serum ready for testing.

Reagent

Each liter contains approximately:

Colloidal silica	15%
Na ₂ O	< 0.8%

Surfactants, buffering components and non-reactive ingredients.

Precautions

Handle this reagent using good laboratory practice. DO NOT PIPETTE REAGENT BY MOUTH. Avoid contact with skin and eyes. If contact occurs, wash affected area with copious amounts of cold water. Clean spills immediately. Refer to the Catachem CataKlear SDS for additional information.

Reagent Storage and Stability

Store reagent in its original container. Keep container tightly closed when not in use. Store at room temperature 15-30°C (59 - 86°F). Do not freeze or store at or below 0°C (32°F). When stored as directed, the reagent is stable until the expiration date stated on the label.

Working Reagent Preparation

CataKlear is packaged ready for use. No preparation is required.

Specimen Collection and Stability

Serum is the specimen of choice. Serum should be separated immediately from the clot without any red blood cells. Follow each serum's instructions for storage until ready for treatment with CataKlear.

Materials Provided

CataKlear reagent

Materials Required but Not Provided

Volumetric pipettes
Centrifuge tubes
Centrifuge

Procedure

Using volumetric pipettes, add 50 µL of CataKlear to 1.0 mL of serum. Mix and let stand for 10 minutes at room temperature (15 - 30°C). Centrifuge at 1,500 X g for 15 minutes. Allow the centrifuge to stop without using the brake. Carefully remove treated serum supernatant without disturbing sediment and place into a labelled tube. The treated serum is ready for prompt analysis.

Note 1:

The following analytes provide acceptable results after treatment with CataKlear: ALT, Amylase, Alkaline Phosphatase, Creatinine, Phosphorus, Albumin, Total Bilirubin. Additional analytes will be available shortly (in-house data).

Note 2:

After treatment, each analyte result must be multiplied by 1.05 before reporting the test result, to compensate for the slight dilution factor.

Note 3:

The volume of CataKlear to volume of sample is designed for visibly turbid samples. For heavily turbid samples, the amount of CataKlear used with a 1mL serum sample may be increased.

For Example:

100 uL CataKlear added to 1 mL serum produces a test result of 20 U/L ALT

$$20 \text{ U/L ALT} \times 1.1 \text{ (dilution factor correction)} = 22 \text{ U/L ALT}$$

For Example:

200 uL CataKlear added to 1 mL serum produces a test result of 20 U/L ALT

$$20 \text{ U/L ALT} \times 1.2 \text{ (dilution factor correction)} = 24 \text{ U/L ALT}$$



Rev: 06JUNE2016/JRH/DMT

