REF 400060

NAME OF THE PRODUCT
VeraPrep™ Interference

RUO

For Research Use Only (RUO). Not for use in diagnostic procedures.

Description
Immunoassays are based on antigen-antibody binding to generate an assay measurement. Certain types of compounds may alter the immunoassay's critical binding actions and may interfere with assay measurement. VeraPrep Interference can remove common interferents prior to executing immunoassays improving outcomes.

Biotin, anti-biotin immunoglobulins, and anti-streptavidin immunoglobulins may interfere with *In vitro* laboratory tests that employ streptavidin-biotin binding mechanisms. Excess biotin produces falsely low results in sandwich immunoassays because the assay signal is directly proportional to the analyte concentration. Excess biotin in competitive immunoassays causes falsely elevated results because the assay signal is inversely proportional to the analyte concentration. Anti-streptavidin and anti-biotin immunoglobulins may interfere with *In vitro* laboratory tests that employ streptavidin: biotin binding mechanisms. Similar to biotin interference which causes a decreased test signal and false low or false high test result depending on the assay design and format, anti-streptavidin and anti-biotin immunoglobulin interference also results in a decreased test signal but via different mechanisms. HAAA's (human anti-animal antibodies) may be produced in response to therapeutic agents that include animal-derived monoclonal antibodies. HAMA (Human anti-mouse antibodies) constitute a subset of HAAA and is the most common of this interfering antibody type. ***(1-9)***

Reagents and Materials Provided

CONTENT

REAGENT — **5mL** Streptavidin coated superparamagnetic nanoparticles coupled with TRU BLOCK® and animal antibodies (mouse, goat, sheep, rabbit and bovine) in TRIS buffer and detergent. Preservative: 0.05% sodium azide.

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REAGENT	1x 5mL
Σ	50

MATERIALS REQUIRED BUT NOT PROVIDED

1. Pipetting device(s) capable of delivering 50 µL up to 1000 µL
2. Disposable pipette tips
3. Micro tube 2ml with cap (SARSTEDT Order Number 72.694)
4. Vortex mixer
5. Strong magnet, such as VeraMag™ (Part No. 500020)
6. Timer
7. Laboratory mixer
8. Transfer tube
9. Personal protective equipment

STORAGE AND STABILITY

Upon receipt, store in the box at 2°- 8°C. Refer to the expiration date marked on the vial label.

WARNINGS AND PRECAUTIONS

1. For Research Use Only. Not for use in diagnostic procedures.
2. Do not use reagent beyond its expiration date.
3. This product contains sodium azide. For a specific listing, refer to the **REAGENTS AND MATERIALS PROVIDED** section. This material and its container must be disposed of in a safe way.
4. Dispose of all potentially contaminated test components in a biohazard container.
5. If specimens or reagent has been stored in a refrigerator, allow it to warm to room temperature before performing the Standard Procedure or Enhanced Procedure.
6. Each box contains 1 foam vial holder (donut) to hold the VeraPrep Interference reagent vial during use and to prevent it from accidently falling over and spilling reagent.
7. Remove the reagent storage solution using a strong magnet, such as VeraMag™ (Part No. 500020 or 500021), before adding the sample to prevent sample dilution.
8. VeraPrep Interference should be used with SARSTEDT tubes (Order Number 72.694). Other tubes types have not been studied.
9. Do not incubate the VeraPrep Interference reagent on a strong magnet without any storage solution or sample.

Reagent Preparation

The reagent is in the form of a liquid and must be well mixed prior to use to ensure homogeneous resuspension of the nanoparticles.

Standard Procedure

The VeraPrep Interference Standard procedure uses a 1:2 ratio of VeraPrep Interference reagent to serum or plasma sample (e.g., 100 µL reagent and 200 µL sample) to deplete biotin interference up to 100 ng/mL, anti-streptavidin and HAMA interference up to 10 µg/mL, and both anti-biotin antibody and HAAA interference up to 5 µg/mL. Smaller and larger sample volumes can be used if a 1:2 ratio of reagent: sample is maintained.

Standard Procedure Sample Volumes		
VeraPrep Interference (µL)	Serum or Plasma (µL)	Samples (Uses per Vial)
50	100	100
100	**200**	**50**
250	500	20

VeraPrep Interference Standard Procedure:

1. Remove the VeraPrep Interference reagent vial from storage and vortex for a minimum of 10 seconds at medium speed to mix well and resuspend the reagent.
2. Insert an empty Micro tube 2ml (SARSTEDT Order Number 72.694) into the VeraMag magnet until the collar of the tube contacts the magnet frame.
3. Dispense **100 µL** of the well-mixed **reagent** into the empty tube to separate the reagent on the magnet for > 30 seconds to form a reagent pellet.
4. Carefully aspirate and discard all of the storage buffer supernatant (~100 µL) without disturbing the reagent pellet.
5. Dispense **200 µL** of well-mixed serum or plasma **sample** into the tube containing the reagent pellet.
6. Tighten the screw cap on the tube, remove the tube from the magnet, and vortex for a minimum of 10 seconds at medium speed to mix well and resuspend the reagent in the sample.
7. Place the tube onto a laboratory mixer at medium speed and **incubate** at room temperature for **10 minutes**.
8. Loosen and remove the screw cap and insert the tube into the magnet until the collar of the tube contacts the magnet frame.
9. Magnetically separate the reagent for > 4 minutes to form a reagent pellet.
10. Carefully aspirate the sample supernatant without disturbing the reagent pellet and dispense the sample into a transfer tube for testing. **Note**: All of the sample supernatant (~ 200 µL) can be aspirated if this step is performed carefully. If any of the reagent is accidentally aspirated then simply return the sample/reagent mixture to the tube and return to step 9.
11. The sample is now ready for testing.

If it is determined a greater interferent binding capacity is beneficial, increase the volume of VeraPrep Interference reagent used in related to the sample volume.

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REAGENT Reagent