

ANTIGENIX AMERICA inc.

## PRODUCT INFORMATION SUMMARY

### Human GM-CSF

Product Number **RHF230CKX**

### "SUPER X" ELISA Kit

5 Plate Kit ( 5 x 96 tests)

Product Number **RHF230CKX2** ( 2 x 96 tests)

#### Items Provided:

**RHF230CKX1** ( 96 tests)

**PRE-COATED ELISA Plates** (single , 2, or 5 plates)  
Biotin-Labeled tracer 25.0 ug or 0.5 mL (see vial)  
Antigen Standard 1.0 ug or 5.0 ug ( see vial)  
Streptavidin-HRP 0.5 mL  
TMB Substrate 25 mL x 2 ( 15 mL - 2 plate)  
Wash Buffer Concentrate 125 mL ( 20X);or 50 mL (2 plate kit)

#### DESCRIPTION:

Human Granulocyte -Macrophage Colony Stimulating Factor ( GM-CSF) **SUPER X ELISA Kit** provides single, two or five **PRE-COATED** microplates coated with antigen affinity purified capture antibody stabilized with our proprietary ELISA coating/blocking reagent. A biotin labeled tracer antibody, antigen standard, HRP developing reagents and wash buffer are included.

Note: Reconstitute components only when ready to run assay.

#### TRACER ANTIBODY:

Provided as 25 ug ( lyophilized )or as **0.5 mL liquid @ 50.0 ug/mL ( see vial)** of Biotin labeled, antigen-affinity purified antibody, additive-free. Reconstitute the 25 ug ( lyophilized vial) in 500 uL sterile water **containing 0.1% BSA.** ( FREEZE aliquots for long-term storage). -

**\*\*For liquid vial store refrigerated only ( contains preservative)\*\*.**

**STANDARD:** Provided as 1.0 ug or 5.0 ug ( **see vial**) of recombinant Human GM-CSF. Quick-spin and **reconstitute in distilled water** (pH 8.0) - concentration approx. 0.1 mg/mL. Further dilutions can be made in 0.1% BSA in PBS ( Diluent).

#### DEVELOPING REAGENTS:

- Streptavidin-HRP ( S100180CX) 0.5 mL - **store @ -20 Deg. C.**
- TMB Substrate Solutions - Part A and Part B ( 25.0 mL each) cat # ES200CX
- Wash Buffer Concentrate (20X concentrate) Mix 1 volume of wash buffer with 19 volumes of distilled water. Stable for one month @ 4 Deg. C. once mixed to working volume.
- Stop Solution ( 1X) **CAUTION-CAUSTIC.**
- Diluent ( 10X) Dilute 1 part with 9 parts distilled water

**HANDLING/ STORAGE:** Reconstitute reagents when ready to build ELISA assay. Tracer Antibody be stored for approximately one month at 4 Degrees C. Or store **frozen** at -20 Degrees C. for up to 6 months.

Biotin tracer antibody provided as 0.5 mL liquid - STORE refrigerated only - contains preservative.

Standard ( rec. GM-CSF) can be stored in liquid state ( @ 4 Deg. C.) For up to one week, or store **frozen, with addition of 0.1% BSA,** at -20 Deg. C. for up to 2 months. AVOID repeat freeze-thaw. Pre-coated ELISA plates should be stored in sealed plastic bag with desiccant pack, and are stable for one year from date of receipt.

**Store** Streptavidin-HRP ( S100180CX) **frozen** @ -20 Deg. C.

Store TMB solutions and wash buffer concentrate at 4 Deg. C.  
**CAUTION: Substrate Solution B contains 20% acetone. FLAMMABLE.**  
**Keep away from sources of heat or flame.**

**MATERIALS RECOMMENDED:**

Tween -20.  
BSA ( ELISA grade only, protease-free)  
Dubelco's PBS (10X)  
PBS: Dilute to 1XPBS in sterile water

**PLATE PREPARATION:**

Plates are **pre-coated** with capture antibody and blocked/stabilized with ANTIGENIX proprietary ELISA coating stabilizer ( EA150) and are **ready to use!**

Store plates refrigerated ( @ 4 Deg. C.) in sealed plastic bags with desiccant pack. Plates can be stored for one year from data of receipt.

**PROTOCOL:**

**STANDARD/SAMPLE:** Dilute **a portion of the** standard ( store unused standard in aliquots, high concentration, frozen -20 Deg. C. with addition of 0.1% BSA) from **4.0 ng/mL** to zero in diluent (8-point 1:2 serial dilution). Immediately add 100 uL of standard or sample to each well in duplicate. **Incubate** at room temp. for **90 minutes.**

**DETECTION:** Aspirate and wash plate 4 times. **Dilute** detection (Biotin Tracer) antibody in diluent to concentration of **0.10 ug/mL.** ( approx. 1:500 from 50.0 ug/mL) Add 100 uL per well. **Incubate** at room temperature for **1 hour.**

**STREPTAVIDIN-HRP:** Aspirate and wash plate 4 times. Dilute Streptavidin-HRP conjugate approx. **1:2,000** in diluent. (May need to optimize) Add 100 uL per well, incubate 30 minutes at room temperature.

**SUBSTRATE: Prepare substrate solution** no more than 15 minutes before last incubation of assay: Mix one part TMB Solution A with one part TMB Solution B in a clean container. If, upon mixing, TMB solution turns blue - TMB solution is **contaminated-DO NOT USE**. Use mixed substrate solution **WITHIN 2 Hours, and AVOID DIRECT LIGHT**.

Aspirate and wash plate 4 times. **Note:** Wash steps are critical! Add 100 uL substrate solution to each well. **Incubate** at room temp. for color development. **Add** 100 uL of **Stop solution** ( 2N Sulfuric Acid or reagent provided) within 10-15 minutes to stop color development - gently tap plate to mix. **Read plate @ 450 nm** within 30 minutes of addition of stop solution.

NOTE: reliable standard curves are obtained when O.D. readings do not exceed 0.25 units for the zero standard concentration, or 2.0 units for the highest standard concentration.

**X-Reactvity data:**

**No** measurable X-reactivity was observed @ 40-50 ng/mL with following factors:

Rat GM-CSF  
Mouse GM-CSF, G-CSF, M-CSF  
Human: M-CSF, G-CSF, SCF

**RESEARCH USE ONLY -NOT For DIAGNOSTIC USE**

ANTIGENIX AMERICA Inc.

[WWW.ANTIGENIX.com](http://WWW.ANTIGENIX.com)