# ANTIGENIX AMERICA, INC.

# PRODUCT INFORMATION SUMMARY

# Mouse IL-17 ELISA Construction Kit

Product Number RMF504CK Approx. 960 tests Product Number RMF504CKC With Developing Reagents:

Capture Antibody100.0 ugELISA Coating Stabilizer 50 mLBiotin-Labeled tracer25.0 ugStreptavidin-HRP 0.5 mLAntigen Standard1.0 or 5.0 ugTMB Substrate (50 mL x 2)WASH Buffer (20X) 100 mL

# DESCRIPTION:

This ELISA CONSTRUCTION Kit provides antigen affinity purified capture and tracer antibodies, and antigen standard sufficient for **approximately** ten microplates. Working concentrations must be optimized by customer.

Note: Reconstitute components only when ready to run assay.

#### CAPTURE ANTIBODY:

Provided as lyophilized, **100.0 ug**, additive-free. Reconstitute in 0.50 mL sterile water (200.0 ug/mL).

# TRACER ANTIBODY:

Provided as 25 ug ( lyophilized ) of Biotin labeled, antigenaffinity 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). -

STANDARD: Provided as 1.0 ug or 5.0 ug (see vial) of recombinant Mouse IL-17A. Quick-spin and reconstitute in 50 uL of sterile water. Further dilutions can be made in 0.05% Tween-20, 0.1% BSA in PBS.

**DEVELOPING REAGENTS:** Supplied with catalog # ending in "CKC".

- ELISA Coating/ Blocking Reagent (EA150C) 50.0 mL (5X Solution)
- Streptavidin-HRP ( S100180C) 0.5 mL store @ -20 Deg. C.
- TMB Substrate Solutions Part A and Part B ( 50.0 mL each) cat # ES200C
- WASH Buffer (20X) Dilute 1 part with 19 parts distilled water

**HANDLING/ STORAGE:** Reconstitute reagents when ready to build ELISA assay. Antibodies - after reconstitution- (Capture and Tracer) can be stored for approximately one month at 4 Degrees C. Or store **frozen** at -20 Degrees C. for up to 6 months.

Standard ( rec. Mouse IL-17A) can be stored in liquid state ( @ 4 Deg. C.) For up to one week, or store **frozen** at -20 Deg. C. (Add 0.1% BSA) for up to 2 months. AVOID repeat freeze-thaw.

#### MATERIALS RECOMMENDED:

ELISA Microplates: Nunc Maxisorp, Prod. # 4420404 Tween -20. BSA Streptavidin-HRP: ANTIGENIX Cat no. S100180 or similar TMB Substrate (ANTIGENIX cat # ES200) Dubelco's PBS (10X) ANTIGENIX ELISA Coating Stabilizer ( cat no: EA150)

#### **RECOMMENDED SOLUTIONS:**

## See ANTIGENIX Developing Reagents listed above

PBS: Dilute to 1XPBS in sterile water WASH BUFFER: ANTIGENIX WB200 or 0.05% Tween-20 in PBS. BLOCK BUFFER: use ANTIGENIX AMERICA coating stabilizer (EA150) or 1% BSA in PBS Substrate Solution: TMB Substrate Solution (ANTIGENIX # ES200) Diluent: 0.05% Tween-20, 0.1% BSA in PBS 2N Sulfuric acid ( stop solution).

# PLATE PREPARATION:

1. Dilute **portion** of capture antibody with 0.05M Carbonate buffer (or PBS) to concentration **1.0 ug/mL**.

Immediately add 100 uL to each ELISA well. Seal the plate and incubate overnight at room temperature.

- 2. Aspirate wells to remove all liquid and wash 4 times using 300 uL of wash buffer per well. After last wash, add 200 uL ANTIGENIX AMERICA ELISA coating stabilizer recommended! (cat # EA150) and incubate for 60 minutes at room temperature. (With coating stabilizer, DO NOT let plate dry prior to use of coating stabilizer. This will stabilize and Block in one step! Refer to data sheet EA150 for complete description of use.
- 3. With ANTIGENIX coating stabilizer ( **recommended** ) aspirate plate but **DO NOT WASH**. For extended storage- dry plate in humidity controlled chamber or similar. ( see data sheet EA150). With standard block reagent, aspirate plate and wash 3X with 300 uL wash buffer.

# **PROTOCOL:**

STANDARD/SAMPLE: Dilute **a portion of the** standard ( store unused standard in aliquots, high concentration, frozen -20 Deg. C.) from 1.0 ng/mL to zero in diluent (serial dilution). Immediately add 100 uL of standard or sample to each well in duplicate. Incubate at room temp. for approx. 2 hours.

**DETECTION:** Aspirate and wash plate 4 times. **Dilute** portion of detection (Biotin Tracer) antibody in diluent to concentration of **0.20 ug/mL**. Add 100 uL per well. Incubate at room temperature for 1-2 hours. Note: detection antibody can be used in approximate range of 0.10 - 0.50 ug/mL, you may need to optimize for subsequent plates.

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

SUBSTRATE: Aspirate and wash plate 4 times. Add 100 uL substrate solution to each well. (follow directions from manufacturer) Incubate at room temp. for color development. Monitor color development with plate reader at 650 nm wavelength. (for blue color). Stop the color reaction after 10 - 20 minutes by adding 100 uL of 2N Sulfuric acid to each well. Then, read plate at 450 nm .

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-REACTIVITY Data:

Minimal (1%) X-reactivity observed @ 40-50 ng/mL with following factors:

Human IL-17A

No measurable X-reactivity observed with following:

Mouse: IL-1 Beta; IL-3, IL-6, IL-7, IL-10, IL-17F, GM-CSF

### RESEARCH USE ONLY -NOT For DIAGNOSTIC USE

**NOTE:** Kit can be ordered with developing reagents ( cat# ends in 'CKC') - see page 1.

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