# ANTIGENIX AMERICA, INC.

# PRODUCT INFORMATION SUMMARY

# Human Maspin ELISA Construction Kit

Product Number RHF732CK Approx. 960 tests Product Number RHF732CKC With Developing Reagents:

Capture Antibody 100.0 ug Biotin-Labeled tracer 25.0 ug Antigen Standard 5.0 ug

100.0 ug ELISA Coating Stabilizer 50 mL 25.0 ug Streptavidin-HRP 0.5 mL 5.0 ug TMB 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). (FREEZE aliquots for long-term storage)

#### TRACER ANTIBODY:

Provided as 25 ug of Biotin labeled, antigen-affinity purified antibody, additive-free. Reconstitute in 500 uL sterile water **containing 0.1% BSA**. (FREEZE aliquots for long-term storage)

**STANDARD:** Provided as 5.0 ug of recombinant Human Maspin. Quickspin and reconstitute in 50 uL of distilled water. Further dilutions can be made in diluent (see below).

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

- ELISA Coating/ Blocking Reagent (EA150C) 50.0 mL (5X Solution)
- Streptavidin-HRP ( S100180C) 1.0 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 (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. Maspin) 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.

#### 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 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 cat # 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 10.0 ng/mL ( adjust; depending on desired range and sensitivity of first standard curve) 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** detection (Biotin Tracer) antibody in diluent to concentration of **0.20 ug/mL**. Add 100 uL per well. Incubate at room temperature for approx. 1 hour. 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 (see data sheet ES200 for preparation of substrate solution). 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. **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. Monitor the plate every 5 minutes for approximately 30 minutes.

## 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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