## ANTIGENIX AMERICA, INC.

## PRODUCT INFORMATION SUMMARY

# Human SDF-1-Beta ELISA Construction Kit

Product Number RHF630CK Approx. 960 tests

Product Number RHF630CKC With Developing Reagents:

Capture Antibody 100.0 ug ELISA Coating Sta Biotin Tracer 25.0 ug or 0.5mL Streptavidin-HRP Antigen Standard 1.0 ug or 2.0 ug TMB Substrate (

ELISA Coating Stabilizer 50 mL Streptavidin-HRP 0.1 mL TMB Substrate (50 mL x 2) WASH Buffer (20X) 100 mL

#### **DESCRIPTION:**

Human SDF-1-Beta ELISA CONSTRUCTION Kit provides antigen affinity purified polyclonal 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 (Liquid or lyophilized - **see vial)** of Biotin labeled, antigen-affinity purified antibody, additive-free. For lyophilized: Reconstitute in 500 uL sterile water **containing 0.1% BSA**. (FREEZE aliquots for long-term storage).

For vial provided as Liquid - Store refrigerated only - contains preservative

**STANDARD:** Provided as 1.0 ug or 2.0 ug (see vial) of recombinant Human SDF1-Beta. Quick-spin and reconstitute in 100 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) 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. For biotin tracer antibody provided as 0.5 mL, STORE refrigerated only - contains preservative.

Standard (rec. SDF1-Beta) 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. \$100180 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)

Substrate Solution: TMB Substrate Solution (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**. 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 at least 2 hours.

**DETECTION:** Aspirate and wash plate 4 times. Dilute portion of detection (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. Incubate at room temp. for color development. Monitor color development with plate reader at 450 nm wavelength. (correction set to 650 nm). The color reaction may be stopped after 10 - 20 minutes by adding 100 uL of 2N Sulfuric acid to each well.

NOTE: reliable standard curves are obtained when O.D. readings do not exceed 0.25 units for the zero standard concentration, or 1.6 units for the highest standard concentration.

#### RESEARCH USE ONLY -NOT For DIAGNOSTIC USE

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

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