# PRODUCT INFORMATION SUMMARY

Human ICAM-1
"SUPER X" ELISA Kit

Product Number RHF717CKX

5 Plate Kit ( 5 x 96 tests)

RHF717CKX2 ( 2 x 96 tests) RHF717CKX1 ( 96 tests )

Items Provided:

PRE-COATED ELISA Plates (Single, 2 or 5 plates)

Biotin-Labeled tracer 25.0 ug or 0.5 mL ( see vial) Antigen Standard 10.0 ug or 1.0 ug ( see vial)

Streptavidin-HRP 0.5 mL

TMB Substrate 25 mL x 2 ( 15 mL - 2 plate) Wash Buffer Concentrate 125 mL ( 20X) ( 50 mL - 2 plate)

### DESCRIPTION:

Human ICAM-1 **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. 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 10.0 ug or 1.0 ug ( see vial) of recombinant Human ICAM-1. Quick-spin and reconstitute in 100 uL sterile or distilled water (pH 8.0) - Further dilutions can be made in 0.05% Tween-20, 0.1% BSA in PBS.

# 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.
- Diluent (10X) -Dilute 1 part with 9 parts distilled water
- STOP Solution (1X) 2N sulfuric acid CAUTION: CAUSTIC

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

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

Standard (rec. ICAM-1) 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. Precoated ELISA plates should be stored in sealed plastic bag with desiccant pack, and are stable until expiration date on kit box.

Store Streptavidin-HRP ( S100180X) 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
Diluent: use ANTIGENIX ED100 (10X) ( if supplied) :
 Or 0.05% Tween-20, 0.1% BSA in PBS

#### PLATE PREPARATION:

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

Store plates refrigerated ( @ 4 Deg. C.) in sealed plastic bags with desiccant pack.

#### 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 2.0 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 (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 **30 minutes**.

STREPTAVIDIN-HRP: Aspirate and wash plate 4 times. Dilute Streptavidin-HRP conjugate approx. 1:2,500 in diluent. = 2.0 uL HRP to 5.0 mL 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) within **10 minutes** to stop color development - gently tap plate to mix. Read plate at 450 nm within 30 minutes of addition of stop solution.

NOTE: reliable standard curves are obtained when O.D. readings do not exceed 0.30 units for the zero standard concentration, or 2.0 units for the highest standard concentration.

# X-Reactivity data:

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

Human: IFN Gamma, PE-CAM, VCAM-1, TNF alpha, IL-1 beta

RESEARCH USE ONLY -NOT For DIAGNOSTIC USE

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