## PRODUCT INFORMATION SUMMARY

## Human BDNF <br> ELISA Construction Kit

Product Number RHF270CK
Approx. 960 tests
Capture Antibody 100.0 ug
Biotin-Labeled tracer
Antigen Standard

| 100.0 ug | ELISA Coating Stabilizer 50 mL |
| :---: | :--- |
| 25.0 ug | Streptavidin-HRP 0.5 mL |
| 2.0 ug | TMB Substrate $(50 \mathrm{~mL}$ 2) |
|  | WASH Buffer (20X) 100 mL |

ELISA Coating Stabilizer 50 mL ( WASH Buffer (20X) 100 mL

Product Number RHF270CKC
With Developing Reagents:
With Developing Reagents: RHF270CKP - with Developing Reagents \& 10 plates

## DESCRIPTION:

This ELISA CONSTRUCTION Kit provides antigen affinity purified capture and tracer antibodies, and antigen standard sufficient for approximately ten microplates ( 960 tests).
Working concentrations must be optimized by customer.
X-Reactivity with both Rat and Mouse BDNF is observed.
Note: Reconstitute components only when ready to run assay.

## CAPTURE ANTIBODY:

Provided as lyophilized, $100.0 \mathbf{u g}, ~ a d d i t i v e-f r e e . ~ R e c o n s t i t u t e ~$ in 0.50 mL sterile water ( $200.0 \mathrm{ug} / \mathrm{mL}$ ).

## 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.
STANDARD: Provided as 2.0 ug of recombinant Human BDNF. Quick-spin and reconstitute in 50 uL of distillied water. Further dilutions can be made in $0.1 \%$ BSA in PBS.

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

- ELISA Coating/ Blocking Reagent ( EA150C) 50.0 mL ( 5 X Solution)
- Streptavidin-HRP (S100180C) 0.5 mL - store @ $-20 \mathrm{Deg} . \mathrm{C}$.
- 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. Human BDNF) 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:

Note: see ANTIGENIX Developing reagents above.
PBS: Dilute to 1 XPBS 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: ANTIGENIX ED100 or 0.1\% BSA in PBS
2 N Sulfuric acid (stop solution).

## PLATE PREPARATION:

1. Dilute portion of capture antibody with 0.05 M Carbonate buffer (or PBS) to concentration $1.0 \mathrm{ug} / \mathrm{mL}$.

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 $3 X$ 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 $10.0 \mathrm{ng} / \mathrm{mL}$ to zero in diluent (1:2, 8 point 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 $0.20 \mathrm{ug} / \mathrm{mL}$. (Approx. 1:250 from $50.0 \mathrm{ug} / \mathrm{mL}$ ) Add 100 uL per well. Incubate at room temperature for approx. 40-60 minutes.
Note: detection antibody can be used in approximate range of 0.10 - $0.50 \mathrm{ug} / \mathrm{mL}$, 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. Stop the color reaction after approx. 10 - 15 minutes by adding 100 uL of 2 N Sulfuric acid to each well. Then, 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 0.30 units for the zero standard concentration, or 2.0 units for the highest standard concentration.

X-Reactivity with both Mouse and Rat BDNF is observed.

## RESEARCH USE ONLY -NOT For DIAGNOSTIC USE

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

And with Developing Reagents and ten blank ELISA plates ( 'CKP')

