

TECHNICAL DATA SHEET

Recombinant Human BDNF (Carrier-free)

Catalog Number: 21-8366

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human BDNF (Carrier-free)

DESCRIPTION

Brain-derived neurotrophic factor (BDNF) is a member of the neurotrophic growth factor family of proteins that are critical for the differentiation and survival of several classes of neurons in both the central nervous system and the peripheral nervous system. BDNF binds to and mediates its neurotrophic properties through the tyrosine kinase receptor TrkB. BDNF is synthesized and secreted as a prepropeptide that is proteolytically processed to yield the mature protein. Mouse and Human BDNF sequences are identical.

MOLECULAR MASS

Recombinant human BDNF is a 27.0 kDa homodimer of two 120 amino acid subunits linked by strong non-covalent interactions.

AMINO ACID SEQUENCE

MHSDPARRGE LSVCDISEW VTAADKKTAV DMSGGTVTVL EKVPVSKGQL KQYFYETKCN PMGYTKEGCR GIDKRHWNSQ
CRTTQSYVRA LTMSKKRIG WRFIRIDTSC VCLTIKRGR

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1 EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Chicken, Frog, Guinea Pig, Hamster, Monkey, Mouse, Rat

BIOACTIVITY

Determined by its ability to stimulate the proliferation of rat C6 cells. The expected ED₅₀ for this effect is 0.5-1.0 µg/ml.

RESEARCH AREAS

Neurobiology; Proliferation; Stem Cells & Differentiation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Nawa H and Takei N. 2004. Trends Neurosci. 24(12): 683-684. Binder DK and Scharfman HE. 2004. Growth Factors. 22(3): 123-131. Pyle AD, Lock LF and Donovan PJ. 2006. Nat Biotechnol. 24(3): 334-350.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

For Research Use Only.

Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.