

Multi-Neurotrophin Rapid Screening ELISA Kit: Human

Catalogue No.: BEK-2227

Description: The Biosensis Multi-Neurotrophin Rapid™ Screening ELISA kit has been designed to allow rapid screening and quantification of human NGF, BDNF, NT3 and NT4/5 in cell culture supernatants, lysates and brain extracts only if used as directed. Caution should be exercised for assaying neurotrophins in blood. Please refer to the kit protocol for specific use instructions for each substrate application, in particular human serum and plasma samples.

This two-plate kit consists of four sets of 6 strips for each Neurotrophin, allowing for the assay of 16 samples per Neurotrophin tested and a full range of standards, all run in duplicate. It provides the identical sensitivities and ranges that are achieved in the complete, individual ELISA kits, thus allowing easy progression into the larger individual assay sizes when needed. The Multi-Neurotrophin Rapid™ Screening ELISA kit therefore presents a cost effective way to quickly screen multiple samples, which can then be published or used prior to a more extensive analysis with the individual kits. The kit comes complete with all detection reagents and is ready to use. Individual coated strips are provided and each set of standards and detection antibodies are color-coded.

NOTE: For research use only. Not for diagnostic and clinical purposes.

Related products: BEK-2211 (Rapid BDNF ELISA)BEK-2212 (Rapid NGF ELISA)BEK-2218 (Rapid NT4/5 ELISA)BEK-2221 (Rapid NT3 ELISA)

Batch No.: Refer to the product label.

Antigen: The Neurotrophin family of growth factors in all mammals including human has four members including Nerve Growth Factor (NGF), Brain-Derived Neurotrophic Factor (BDNF), Neurotrophin 3 (NT3) and Neurotrophin 4/5 (NT4/5). These are all essential to brain development, maturation and adult function, particularly for cell differentiation, survival, death and synaptic regulation.

Specificity: This Multi-Neurotrophin Screening kit uses the same antibodies as in the individual Rapid ELISA kits. Each kit has been tested for cross-reactivity with other closely related neurotrophins and no cross-reactivity has been observed at 25 ng/mL of each neurotrophin tested.

Cross-reactivity: The antibodies used in this kit detect the mouse and rat form of each neurotrophin, but with varying efficiency depending on the target protein.

Storage: Store at 2-8C

Expiry Date: 12 months from purchase.

Specific References: Woo JH et al. (2019) "Effect of Dehydrocostus Lactone Isolated from the Roots of Aucklandia lappa on the Apoptosis of Endometriotic Cells and the Alternative Activation of Endometriosis-Associated Macrophages." Am J Chin Med. [Epub ahead of print] Application: Human cell culture supernatants.

Kalinowska-Lyszczarz A et al. (2018) "Immune-cell BDNF expression in treatment-naïve relapsing-remitting multiple sclerosis patients and following one year of immunomodulation

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therapy." *Neurol Neurochir Pol.* [In Press] Application: Human PBMC cell lysates.

Lindsay SL et al. (2016) "Comparative miRNA-Based Fingerprinting Reveals Biological Differences in Human Olfactory Mucosa- and Bone-Marrow-Derived Mesenchymal Stromal Cells." *Stem Cell Reports.* 6(5):729-42 Application: MSC-conditioned medium/cell supernatant.

Carnevale G et al. (2016) "Human dental pulp stem cells expressing STRO-1, c-kit and CD34 markers in peripheral nerve regeneration." *J Tissue Eng Regen Med.* [Epub ahead of print] Application: Supernatant of human dental pulp stem cells (hDPSCs).

Kit components: The ELISA kit box contains 2 x 96-well pre-coated strip plates (6 strips/48 wells per neurotrophin target), protein standards, detection reagents, wash and sample buffers, substrate buffer and detailed protocols.

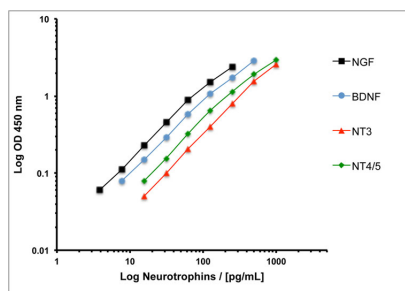
Range: NGF (3.9 - 250 pg/mL); BDNF (7.8 - 500 pg/mL); NT3 (15.6 - 1000 pg/mL); NT4/5 (15.6 - 1000 pg/mL)

Sensitivity: Typical LODs achieved based on 150% of background OD:

NGF: 3 pg/mL
BDNF: 1 pg/mL
NT3: 4 pg/mL
NT4/5: 10 pg/mL

Kit protocol: Please refer to our online product listing for current protocol/MSDS versions.

MSDS: Please refer to our online product listing for current protocol/MSDS versions.



These standard curves generated in our laboratories is for demonstration purposes only, but can be used as a guide to expected performance. A standard curve should be generated for each assay.

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