

## Multi-Neurotrophin Rapid Screening ELISA Kit: Mouse

**Catalogue No.:** BEK-2231

**Description:** The biosensis Multi-Neurotrophin Rapid™ Screening ELISA kit has been designed to allow rapid screening and quantification of mouse NGF, BDNF, NT3 and NT4/5 in cell culture supernatants, lysates and brain extracts only if used as directed. Please refer to the kit protocol for specific use instructions for each substrate application.

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-2213 (Rapid Mouse 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 human 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:** Leitao L et al. (2020) Osteoblasts are inherently programmed to repel sensory innervation Bone Res. 8:20. Application: Culture supernatant.

Yamada K et al. (2020) The impact of ovariectomy on olfactory neuron regeneration in mice. Chem Senses. [Epub ahead of print]. Application: Mouse olfactory bulb homogenate.

Hutson TH et al. (2019) Cbp-dependent histone acetylation mediates axon regeneration induced by environmental enrichment in rodent spinal cord injury models. Sci Transl Med.

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11(487). Application: Rodent DRG lysates.

Miura-Yura E et al. (2019) Secreted factors from cultured dental pulp stem cells promoted neurite outgrowth of dorsal root ganglion neurons and ameliorated neural functions in streptozotocin-induced diabetic mice. *J Diabetes Investig.* [Epub ahead of print]. Application: Conditioned medium of stem cells from human exfoliated deciduous teeth.

Noda T et al. (2019) Effects of Tokishakuyakusan on regeneration of murine olfactory neurons in vivo and in vitro. *Chem Senses.* [Epub ahead of print]. Application: Mouse olfactory bulb homogenate.

**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

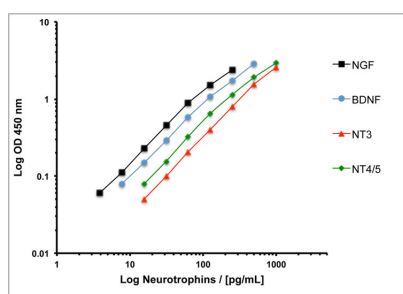
BDNF: 1 pg/mL

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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