

## NGF Rapid ELISA Kit: Mouse (2 Plates)

**Catalogue No.:** BEK-2213-2P

**Description:** The Biosensis NGF Rapid™ enzyme-linked immunosorbent assay (ELISA) Kit is a sandwich ELISA that allows the quantification of mouse NGF in less than 3 hours in cell culture supernatants and brain extracts only if used as directed. Please refer to the kit protocol for specific use instructions for each substrate application.

This ELISA kit consists of a pre-coated mouse monoclonal anti-NGF capture antibody, a biotinylated anti-NGF detection antibody and horseradish peroxidase (HRP)-conjugated streptavidin. The addition of a substrate (3,3',5,5'-tetramethylbenzidine, TMB) yields a colored reaction product which is directly proportional to the concentration of NGF present in samples and protein standards. A mouse NGF positive control (QC sample) is provided to assure consistent assay performance.

This NGF ELISA kit is designed to measure mouse NGF and thus employs a mouse NGF standard. The mouse NGF standard supplied has been purified from mouse submaxillary glands according to published procedures. The calibrator standard reflects the native state of mouse NGF protein and has been chosen to give most accurate quantification of natural NGF protein levels in mouse samples.

Due to a high degree of NGF sequence homology, the antibodies used in this kit will also detect NGF from other species including human and rat! This ELISA kit preferentially detects the mature form of NGF. Cross- reaction of full-length mouse proNGF was < 0.1% when assayed at 25 ng/mL in assay buffer, and not detectable when assayed across the mature NGF calibration range.

This kit has not been tested for other applications. It has been configured for research use only and is not to be used in diagnostic or clinical procedures.

**Batch No.:** Refer to the product label.

**Antigen:** FUNCTION: Nerve growth factor is important for the development and maintenance of the sympathetic and sensory nervous systems. It stimulates division and differentiation of sympathetic and embryonic sensory neurons. SUBUNIT: Homodimer, associated by non-covalent forces. SUBCELLULAR LOCATION: Secreted protein. SIMILARITY: Belongs to the NGF-beta family.

**Other Names:** Beta-nerve growth factor; Ngfb

**Accession:** NGF\_MOUSE

**Specificity:** Mouse

**Cross-reactivity:** The antibodies used in this ELISA kit bind epitopes within the mature domain of the protein. No cross-reactivity was observed with brain derived neurotrophic factor (BDNF), neurotrophin-3 (NT-3) and NT-4/5 tested at 25 ng/mL in assay buffer. Due to a high degree of NGF sequence homology, the antibodies used in this kit will also detect NGF from other species including

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human and rat! Mature mouse NGF (27 kDa) and full-length mouse proNGF (50 kDa) were assayed in parallel at equimolar protein concentrations across the Mouse NGF ELISA calibration range (3.9-250 pg/mL; 0.14-9.2 pmol/L). OD readings for mouse proNGF were indistinguishable from the assay's blank OD readings.

**Storage:** Store at 2-8C

**Expiry Date:** 12 months from purchase.

**Specific References:** Mossa AH et al. (2020) Antagonism of proNGF or its receptor p75 NTR reverses remodelling and improves bladder function in a mouse model of diabetic voiding dysfunction. *Diabetologia*. [Epub ahead of print]. Application: Mouse bladder extracts (RIPA).

Roy S et al. (2020) Neurogenic Tissue Nanotransfection in the Management of Cutaneous Diabetic Polyneuropathy. *Nanomedicine*. [Epub ahead of print]. Application: Mouse lysate.

Vigli D et al. (2018) Chronic treatment with the phytocannabinoid Cannabidiol (CBDV) rescues behavioural alterations and brain atrophy in a mouse model of Rett syndrome. *Neuropharmacology*. 2018 Jul 26; [Epub ahead of print]. Application: Mouse hippocampus homogenate.

Ryu JC et al. (2018). Role of proNGF/p75 signaling in bladder dysfunction after spinal cord injury. *J Clin Invest*. [Epub ahead of print]. Application: Mouse urine.

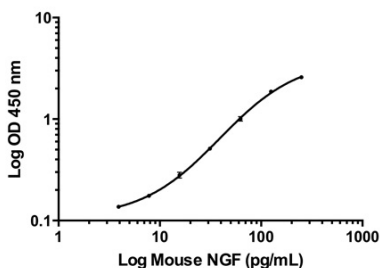
**Kit components:** The ELISA kit box contains 2 x 96-well pre-coated strip plates, protein standards, QC sample, detection reagents, wash and sample buffers, substrate buffer and detailed protocols.

**Range:** 3.9 - 250 pg/mL

**Sensitivity:** Typical limit of detection (LOD) for mouse NGF is 2 pg/mL determined as 150% of the blank value.

**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.



This standard curve 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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