



## proNGF Rapid ELISA Kit: Mouse and Rat (2 plates)

**Catalogue No.:** BEK-2236-2P

**Description:** The Biosensis Mouse and Rat proNGF Rapid™ enzyme-linked immunosorbent assay (ELISA) Kit is a sandwich ELISA that allows the quantification of rodent full-length proNGF protein in less than 4 hours in cell culture supernatants, cell lysates and tissue homogenates only if used as directed. This ELISA Kit has also successfully been used on mouse urine samples (Ryu JC et al., 2018). Please refer to the kit protocol for specific use instructions for each substrate application.

This ELISA kit contains a recombinant mouse proNGF standard expressed in E.coli and consists of a pre-coated anti-proNGF capture antibody, a biotinylated anti-proNGF 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 proNGF present in samples and protein standards. A proNGF positive control (QC sample) is provided to assure consistent assay performance.

This ELISA kit detects rat proNGF due to high degree of homology (96%) with mouse proNGF based on amino acid sequence, and the ability of this kit in detecting proNGF in rat PC12 cell lysates and rat brain tissue homogenate. In the absence of a true rat proNGF standard, results may be expressed as 'mouse proNGF equivalents'.

This ELISA kit shows only 20% reactivity with the human form of proNGF and is therefore not suitable to quantify human proNGF. No cross-reactivity was observed with mature mouse NGF and full-length proBDNF when tested in assay buffer. The antibodies used in this ELISA kit bind epitopes within the pro-domain (capture) and mature domain (detection) of the protein, thus this ELISA assay does not detect the pro-domain peptide.

This kit has not been tested for other applications. Sufficient amount of proNGF standard is supplied to allow for spike- and recovery experiments in order to validate this ELISA assay for other sample matrices if required. This kit has been configured for research use only and is not to be used in diagnostic or clinical procedures.

**Related products:** BEK-2226-2P/1P (Human proNGF Rapid ELISA).BEK-2213-2P/1P (Mouse NGF Rapid ELISA).BEK-2214-2P/1P (Rat NGF Rapid ELISA).

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

**Antigen:** Nerve growth factor (NGF) is synthesized as a precursor (proNGF) which may be released and have physiological functions to cause cell death. It binds neurotrophin receptor p75 and sortilin and may also be important for the development of nervous system. proNGF is synthesized in target tissues and glia, transported retrogradely and may be released.

**Other Names:** pro-beta nerve growth factor; proNGF; NGF

**Accession:** NGF\_MOUSE

**Specificity:** Mouse and rat proNGF.

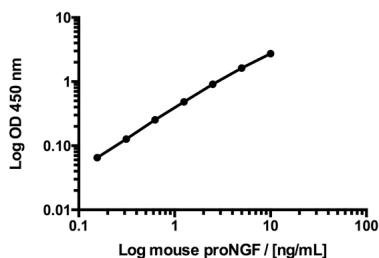
---

FOR RESEARCH USE ONLY



## proNGF Rapid ELISA Kit: Mouse and Rat (2 plates)

- Cross-reactivity:** Reacts with human proNGF (about 20% reactivity). Does not cross-react with proBDNF and mature NGF. Mature NGF spiked into brain homogenate does not interfere with proNGF quantification.
- Storage:** Store at 2-8C.
- Expiry Date:** 12 months from purchase.
- Specific References:** 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:** 0.156 - 10 ng/mL
- Sensitivity:** Typical limit of detection (LOD) for mouse proNGF is less than 50 pg/mL determined as blank value plus 3x standard deviation of blank OD (n=10).
- 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.

FOR RESEARCH USE ONLY