



NGFR/p75ECD Rapid ELISA Kit: Mouse (2 Plates)

Catalogue No.: BEK-2220-2P

Description: The Biosensis NGFR/p75ECD Rapid™ enzyme-linked immunosorbent assay (ELISA) Kit is a sandwich ELISA that allows the quantification of mouse p75ECD in less than 4 hours in cell culture supernatants and urine only if used as directed. This kit has also been used on mouse hippocampus tissue homogenates. 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-p75ECD capture antibody, a goat anti-p75ECD detection antibody and a horseradish peroxidase (HRP)-conjugated anti-goat antibody. The addition of a substrate (3,3',5,5'-tetramethylbenzidine, TMB) yields a colored reaction product which is directly proportional to the concentration of p75ECD present in samples and protein standards. A mouse p75ECD positive control (QC sample) is provided to assure consistent assay performance.

This NGFR/p75ECD ELISA kit employs a recombinant mouse p75ECD-Fc chimera protein as standard. While there is a current lack of a true mouse p75ECD standard, this ELISA kit allows quantification of mouse p75ECD as p75ECD-Fc mouse equivalents. Please note that the antibodies used in this ELISA cross-react with human NGFR/p75ECD.

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.

Related products: BEK-2219-2P, Human NGFR/p75ECD Rapid™ ELISA

Batch No.: Refer to the product label.

Antigen: The nerve growth factor (NGF) receptor (NGFR), also known as p75 neurotrophin receptor (p75NTR; TNFRSF16; CD271) is a common receptor for the neurotrophins NGF, BDNF, NT-3 and NT-4/5. In neurons, p75NTR mediates a variety of physiological functions including survival, apoptosis, neurite outgrowth and synaptic plasticity. A potential pathological role for p75NTR has become evident in recent years. Altered p75NTR expression levels are implicated in degeneration of spinal motor neurons in human and mouse models of amyotrophic lateral sclerosis (ALS). Importantly, the extracellular domain of p75NTR (p75ECD) is shed from the cell membrane and excreted in urine. Recent findings further suggest that p75ECD could be an early biomarker for ALS in humans, as significantly elevated p75ECD levels are found in urine of ALS patients as compared to healthy controls.

Other Names: Low-affinity nerve growth factor receptor; NGF receptor; Gp80-LNGFR; p75 ICD; Low affinity neurotrophin receptor p75NTR; Tumor necrosis factor receptor superfamily member 16; CD271; NGFR; TNFRSF16.

Accession: TNR16_MOUSE

Specificity: Mouse.

Cross-reactivity: The antibodies used in this ELISA kit are known to cross-react with human p75ECD protein.

Storage: Store at 2-8°C.

FOR RESEARCH USE ONLY



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Expiry Date: 12 months from purchase.

Specific References: Zabbarova IV et al. (2018) Targeting p75 neurotrophin receptors ameliorates spinal cord injury-induced detrusor sphincter dyssynergia in mice. *NeuroUrol Urodyn*. 2018 May 28 [Epub ahead of print]. Application: Mouse urine.

Maejima H et al. (2017) Exercise enhances cognitive function and neurotrophin expression in the hippocampus accompanied by changes in epigenetic programming in senescence-accelerated mice. *Neurosci Lett*. doi: 10.1016/j.neulet.2017.11.023. [Epub ahead of print]. Application: Mouse hippocampus homogenates.

General References: DiStefano & Johnson (1988) *Proc Natl Acad Sci USA* 85: 270-274.

Shepherd et al. (2014) *PLoS ONE* 9(1): e87398. doi:10.1371/journal.pone.0087398.

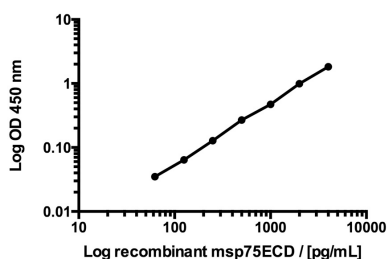
Kit components: The ELISA kit box contains 2 x 96-well pre-coated strip plates, protein standards, QC sample, detection reagents, wash and sample buffers, substrate buffer and detailed protocols.

Range: 62.5 - 4000 pg/mL

Sensitivity: This ELISA kit typically detects 20-40 pg/mL of mouse p75ECD (defined as blank OD plus 3x the standard deviation of the 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.

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