www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

Rat β-NGF ELISA Kit

产品编号: bsk13008
种属: Rat
线性范围: 15.60 - 1,000 pg/mL
应用范围: S/P/CC
检测限: 7 pg/mL
适用样品基质: cell culture supernates, serum, and plasma.
保存条件: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles (Shipped with wet ice.).
产品介绍: Nerve growth factor (NGF) is a neurotrophic factor and neuropeptide primarily involved in the regulation of growth, maintenance, proliferation, and survival of certain target neurons. It is perhaps the prototypical growth factor, in that it was one of the first to be described. Since it was first isolated by Nobel Laureates Rita Levi-Montalcini and Stanley Cohen in 1956, numerous biological processes involving NGF have been identified, two of them being the survival of pancreatic beta cells and the regulation of the immune system. NGF is initially in a 7S, 130-kDa complex of 3 proteins - Alpha-NGF, Beta-NGF, and Gamma-NGF (2:1:2 ratio) when expressed. This form of NGF is also referred to as proNGF (NGF precursor). The gamma subunit of this complex acts as a serine protease, and cleaves the N-terminal of the beta subunit, thereby activating the protein into functional NGF.The term nerve growth factor usually refers to the 2.5S, 26-kDa beta subunit of the protein, the only component of the 7S NGF complex that is biologically active (i.e. acting as signaling molecules). As its name suggests, NGF is involved primarily in the growth, as well as the maintenance, proliferation, and survival of nerve cells (neurons). In fact, NGF is critical for the survival and maintenance of sympathetic and sensory neurons, as they undergo apoptosis in its absence.[3] However, several recent studies suggest that NGF is also involved in pathways besides those regulating the life cycle of neurons. Nerve growth factor prevents or reduces neuronal degeneration in animal models of neurodegenerative diseases and these encouraging results in animals have led to several clinical trials in humans.NGF promotes peripheral nerve regeneration in rats.The expression of NGF is increased in inflammatory diseases where it suppresses inflammation.NGF appears to promote myelin repair.Hence NGF may be useful for the treatment of multiple sclerosis.[24] NGF could also be involved in various psychiatric disorders, such as dementia, depression, schizophrenia, autism, Rett syndrome, anorexia nervosa, and bulimia nervosa.