Semax

Purity: >98% (HPLC on request) I Molecular Formula: C37H51N9O10S Molecular Weight: 813.92g/mol I Sequence: Met-Glu-His-Phe-Pro-Gly-Pro

DESCRIPTION:

It is well known that ACTH/MSH-like peptides (melanocortins) exert pleiotropic non-hormonal actions among their larger activities. Melanocortins affect learning processes and exploratory behavior, regeneration and development, nociceptive and inflammatory processes, accelerate nerve regeneration and improve neuromuscular performance. Together these classes of peptides control many behaviors such as regulating attention, processes of learning, and memory formation as a result of their pronounced effect on CNS functions. Heptapeptide SEMAX (MEHFPGP) is the analogue of ACTH (4-10) that has prolonged neurotropic activity and thus is a good candidate for medical therapy. Currently this peptide is successfully used in treatment of patients with pathologies related to brain circulation dysfunction and with different intellectual-amnestic problems of the CNS. Doctors have prescribed it for many conditions like anxiety, memory improvement, ischemic events, stroke, nerve regeneration, ADHD, opioid withdrawal, and even chronic diseases such as ALS, Parkinson's, and Alzheimer's. Some doctors use it as a preventative measure to protect against chronic disease and to acutely help improve memory and learning processes. It also has a marked antithrombotic and fibrinolytic effect and a gastric protective effect. It has also been suggested in literature that due to its effect on carboxypeptidase it can also increase physical performance and adaptation capacities in exposure to high intensity exercise. At its higher doses, .5mg/kg can even be analgesic.

Often prescribed for: Anti-Thrombosis, ADHD/ Learning, Gastric protection, Physical exertion improvement pain, Metal toxicities.

PROTOCOL:

Content & Potency: 750mcg/0.1ml/spray in nasal spray provided as a 6 ml bottle
Suggested dosage: 1 spray in each nostril 1-2 times daily

CLINICAL RESEARCH:

The Nootropic and Analgesic Effects of Semax Given via Different Routes

The heptapepride Semax (MEHFPGP) is an analog of the fragment ACTH(4-10) with long-lasting actions.The aim of the present work was to study the effects of Semax on learning ability and pain sensitivity in white rats given different doses via the intraperitoneal and intranasal routes. The nootropic effects of Semax were studied in a rest based on the acquisition of a conditioned passive avoidance reaction to pain stimulation. Pain sensitivity was assessed in a hindpaw compression rest. The results showed that i.p. Semax had nootropic and analgesic actions. Dose-response characteristics were different for these different effects.
Intranasal Semax was more effective in improving learning in animals than i.p. Semax bur had no effect on pain sensitivity. Our results provide evidence that different mechanisms and brain structures are involved in mediating the nootropic and analgesic effects of Semax.

D.M, Manchenko & N.Yu, Glazova & Levirskaya, Natalia & L.A, Andreeva & , KamenskiiA.A & N.F,Myasoedov. (2012). The Nootropic and Analgesic Effects of Semax Given via Different Routes. Neuroscience and Behavioral Physiology. 42. 264-270.