
Nogo-66 1-40 (NEP 1-40) Peptide

Catalog Number: Y-0198P

AA Seq: Acetyl-RIYKGVIAIQKSDEGHPFRAYLESEVAISEELVQKYSNS-Amide, MW: 4622.35

Predicted MW: 4.622

Activity: Yes

Purification: HPLC

Storage: Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Myelin-derived axon outgrowth inhibitors, such as Nogo, may account for the lack of axonal regeneration in the central nervous system (CNS) after trauma in adult mammals. Nogo-66 can inhibit axonal outgrowth through an axonal Nogo-66 receptor (NgR). Competitive antagonists of NgR derived from amino-terminal peptide fragments of Nogo-66. The Nogo-66(1-40) antagonist peptide (NEP1-40) blocks Nogo-66 or CNS myelin inhibition of axonal outgrowth in vitro, demonstrating that NgR mediates a significant portion of axonal outgrowth inhibition by myelin. Intrathecal administration of NEP1-40 to rats with mid-thoracic spinal cord hemisection results in significant axon growth of the corticospinal tract, and improves functional recovery. Thus, Nogo-66 and NgR have central roles in limiting axonal regeneration after CNS injury, and NEP1-40 provides a potential therapeutic agent. Sequence: Acetyl-RIYKGVIAIQKSDEGHPFRAYLESEVAISEELVQKYSNS-Amide MW:4622.35