

PRODUCT INFORMATION



Nogo-66 (1-40) (human, mouse, rat) (trifluoroacetate salt)

Item No. 35310

Formal Name: N²-acetyl-L-arginyl-L-isoleucyl-L-tyrosyl-L-lysylglycyl-L-valyl-L-isoleucyl-L-glutamyl-L-alanyl-L-isoleucyl-L-glutamyl-L-lysyl-L-seryl-L-α-aspartyl-L-α-glutamylglycyl-L-histidyl-L-prolyl-L-phenylalanyl-L-arginyl-L-alanyl-L-tyrosyl-L-leucyl-L-α-glutamyl-L-seryl-L-α-glutamyl-L-valyl-L-alanyl-L-isoleucyl-L-seryl-L-α-glutamyl-L-α-glutamyl-L-leucyl-L-valyl-L-glutamyl-L-lysyl-L-tyrosyl-L-seryl-L-asparagyl-L-serinamide, monotrifluoroacetate salt



Synonyms: NEP1-40, Nogo-40, Nogo-A Inhibitory Peptide, RIYKGVIAIQKSDEGHPFRAYLESEVAISEELVQKYSNS-NH₂

MF: C₂₀₆H₃₂₄N₅₆O₆₅ • CF₃COOH

FW: 4,739.1

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Nogo-66 (1-40) (human, mouse, rat) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Nogo-66 (1-40) (human, mouse, rat) (trifluoroacetate salt) in water. The solubility of Nogo-66 (1-40) (human, mouse, rat) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Nogo-66 (1-40) is a peptide fragment of Nogo-A that corresponds to the extracellular domain, Nogo-66, which can induce neurite growth cone collapse in oligodendrocytes.^{1,2} It is also an antagonist of the Nogo-66 receptor (NgR).² It inhibits binding of the NgR agonist AP-Nogo-66 to, and inhibits growth cone collapse induced by the NgR agonist GST-Nogo-66 in, embryonic day 12 (E12) chick dorsal root ganglia (DRG) explants.² Nogo-66 (1-40) partially reverses axonal outgrowth inhibition induced by purified CNS myelin in E12 chick DRG explants (EC₅₀ = 50 nM). It also induces regeneration of corticospinal tract fibers and improves locomotor function in a rat model of midthoracic spinal cord hemisection injury when administered intrathecally at a dose of 75 µg/kg per day.

References

1. Lim, M., Shi, J., Wei, Z., *et al.* Structural characterization of the human Nogo-A functional domains. Solution structure of Nogo-40, a Nogo-66 receptor antagonist enhancing injured spinal cord regeneration. *Eur. J. Biochem.* **271**(17), 3512-3522 (2004).
2. GrandPré, T., Li, S., and Strittmatter, S.M. Nogo-66 receptor antagonist peptide promotes axonal regeneration. *Nature* **417**(6888), 547-551 (2002).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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