Neomycin is a polycationic aminoglycoside antibiotic that exhibits antibacterial and neuromodulatory activities; it was originally found in species of *Streptomyces*. Neomycin binds to 23S rRNA, constraining tRNA in the P-site, inhibiting translocation and ribosomal recycling; together, this results in inhibition of protein synthesis. Neomycin B binds and inhibits bacterial RNase P and bacterial T box antiterminator RNA. Neomycin B inhibits mammalian RNA splicing as well. Neomycin also noncompetitively inhibits cation channels, including P2X receptors and transient receptor potential vanilloid receptor 1 (TRPV1) channels. Additionally, this compound inhibits Ca2+ influx, preventing presynaptic release of acetylcholine and norepinephrine in feline superior cervical ganglia.

### References


**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.