

## Identification and characterization of glycosyltransferase gene from neomycin biosynthetic gene cluster

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Neomycin produced by *S. fradiae* is among the clinically important 2-deoxystreptamine containing aminoglycoside antibiotics. Recently, the biosynthetic gene cluster for neomycin (Nem) was isolated and characterized from the neomycin producing strain, *Streptomyces fradiae*. The homology search with data base indicated that *neo8* was glycosyltransferase in the neomycin (Nem) biosynthetic gene cluster. In the present study, we constructed disruption mutant of *neo8*, mutant that did not synthesize neomycin. But the complementation of mutant by *neo8* experiments allowed us to determine that *neo8* as glycosyltransferase gene from neomycin gene cluster. Here, it is first report that identification and characterization of glycosyltransferase gene form the aminoglycoside producer actinomycetes.