

Open Peer Review on Qeios

Tenecteplase

National Cancer Institute

Source

National Cancer Institute. <u>Tenecteplase</u>. NCI Thesaurus. Code C29489.

A 527 amino acid glycoprotein and the modified form of the naturally occurring human plasminogen activator (tPA) with tissue plasminogen activating activity. Tenecteplase (TNKase) is a serine protease created by introducing substitutions of threonine 103 with asparagine, asparagine 117 with glutamine within the kringle 1 domain, and a tetra-alanine substitution at amino acids 296-299 in the protease domain. TNKase converts fibrin-bound plasminogen to plasmin by cleaving the Arg/Val bond in plasminogen. Plasmin in turn degrades the fibrin matrix of the thrombus mass, thereby helps eliminate blood clots or arterial blockages that cause myocardial infarction.