RFT5-dgA Immunotoxin IMTOX25

National Cancer Institute

Source

A recombinant immunotoxin consisting of the anti-CD25 monoclonal antibody RFT5 fused to the deglycosylated ricin A-chain (dgA) with potential antitumor activity. The monoclonal antibody moiety of RFT5-dgA immunotoxin attaches to CD25 (the alpha chain of the IL-2 receptor complex) on the cell membrane; after internalization, the dgA moiety cleaves the N-glycosidic bond between the ribose and adenine base at position 4324 in 28S ribosomal RNA, resulting in ribosome inactivation, inhibition of protein synthesis, and cell death. CD25 is expressed on activated normal T and B cells and macrophages and is frequently upregulated in many hematologic malignancies.