

[Open Peer Review on Qeios](#)

# Mesothelin/CD3e Tri-specific T-cell Activating Construct HPN536

National Cancer Institute

## Source

National Cancer Institute. *Mesothelin/CD3e Tri-specific T-cell Activating Construct HPN536*. NCI Thesaurus. Code C162935.

recombinant antibody derivative composed of a tri-specific T-cell activating construct (TrITAC) directed against the human tumor-associated antigen (TAA) mesothelin (MSLN) and the epsilon domain of CD3 antigen (CD3e) found on T-lymphocytes which are both linked to either side of an anti-albumin single domain antibody, with potential immunostimulating and antineoplastic activities. Upon administration of the MSLN/CD3e TrITAC HPN536, the anti-MSLN single antibody domain targets and binds MSLN on tumor cells and the anti-CD3e single-chain variable fragment (scFv) targets and binds to CD3e on cytotoxic T-lymphocytes (CTLs), thereby bringing MSLN-expressing tumor cells and CTLs together, which results in the CTL-mediated cell death of MSLN-expressing tumor cells. The albumin-binding domain targets and binds to serum albumin, thereby extending the serum half-life of HPN536. MSLN is overexpressed on the surface of certain tumor cell types. Overexpression of MSLN is often associated with poor prognosis.