

[Open Peer Review on Qeios](#)

# Anti-CLEVER-1 Monoclonal Antibody FP-1305

National Cancer Institute

## Source

National Cancer Institute. *Anti-CLEVER-1 Monoclonal Antibody FP-1305*. NCI Thesaurus. Code C159536.

A monoclonal antibody directed against common lymphatic endothelial and vascular endothelial receptor-1 (CLEVER-1; stabilin-1; FEEL-1), with potential immunomodulatory and antineoplastic activities. Upon administration, anti-CLEVER-1 monoclonal antibody FP-1305 targets and binds to CLEVER-1 that is expressed on tumor endothelial cells. This prevents the recruitment, infiltration and attachment of tumor-associated macrophages (TAMs) at the tumor site. By preventing the binding of TAMs to tumor cells, the infiltration of activated T-regulatory cells (Tregs) to the tumor and the TAM-mediated immune suppression is abrogated, leading to the polarization of TAM from the immunosuppressive M2 macrophages to the anti-inflammatory and immunostimulatory M1 macrophages. This leads to the activation of the immune system, resulting in a cytotoxic T-lymphocyte (CTL)-mediated immune response and inhibition of tumor cell growth and metastasis. CLEVER-1 is an endothelial cell surface molecule involved in immune suppression, cancer growth and metastasis.