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Anti-VEGF/TGF-beta 1 Fusion Protein HB-002T

National Cancer Institute

Source

National Cancer Institute. *Anti-VEGF/TGF-beta 1 Fusion Protein HB-002T*. NCI Thesaurus. Code C162872.

A recombinant, human immunoglobulin Fc fusion protein targeting both the transforming growth factor (TGF) beta 1 (TGF-beta 1; TGFb1) and the vascular endothelial growth factor (VEGF), with potential anti-angiogenic and antineoplastic activities. Upon administration of anti-VEGF/TGF-beta 1 fusion protein HB-002T, the fusion protein specifically and selectively targets, binds to and neutralizes both TGF-beta 1 and VEGF. This prevents TGFb1- and VEGF-mediated signaling and abrogates VEGF/VEGFR-induced angiogenesis and TGFb1-mediated induction of VEGF, which further inhibits angiogenesis. It also inhibits TGFb1-mediated immunosuppression, thereby enhancing anti-tumor immunity in the tumor microenvironment (TME) and promoting a cytotoxic T-lymphocyte (CTL)-mediated immune response against tumor cells leading to tumor cell death.