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# Dalantercept

National Cancer Institute

## Source

National Cancer Institute. *Dalantercept*. NCI Thesaurus. Code C88296.

A soluble fusion protein containing the extracellular domain of activin receptor-like kinase-1 (ALK1) fused to a human Fc domain (ALK1-Fc fusion protein), with potential antiangiogenic and antineoplastic activities. Upon administration, dalantercept binds to various ALK1 ligands, preventing activation of tumor cell ALK1 receptors and so inhibiting the ALK1 signaling pathway; growth factor-induced angiogenesis is thus inhibited, which may result in the inhibition of tumor cell proliferation and tumor cell death. ALK1 is a type I cell surface receptor with serine/threonine kinase activity that mediates signaling by members of the transforming growth factor-beta (TGFbeta) superfamily and plays a key role in angiogenesis; ligands for this receptor include TGFbeta1 and TGFbeta2. The Fc moiety of this fusion protein mediates clearance of ligand-fusion protein complexes by the reticuloendothelial system (RES).