Anti-DR5 Agonistic Antibody DS-8273a

National Cancer Institute

Source

An agonistic monoclonal antibody directed against human death receptor type 5 (DR5), also called tumor necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL) receptor 2, with potential pro-apoptotic and antitumor activities. Upon administration, anti-DR5 agonistic antibody DS-8273a mimics the natural receptor ligand TRAIL and binds to DR5. This activates DR5 and leads to the activation of the death receptor signal pathway, which results in the activation of caspase cascades, the induction of tumor cell apoptosis and a reduction in proliferation of DR5-expressing tumor cells. DR5, a member of the TNF receptor superfamily, is expressed on the surfaces of a variety of tumor cells and plays a key role in the induction of tumor cell apoptosis.