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# Robatumumab

National Cancer Institute

## Source

National Cancer Institute. *Robatumumab*. NCI Thesaurus. Code C71527.

A recombinant, fully human monoclonal antibody directed against the insulin-like growth factor 1 receptor (IGF-1R) with potential antineoplastic activity. Anti-IGF-1R fully human monoclonal antibody SCH 717454 binds to membrane-bound IGF-1R, preventing binding of the ligand IGF-1 and the subsequent triggering of the PI3K/Akt signaling pathway; downregulation of this survival pathway may result in the induction of apoptosis and decreased cellular proliferation. The activation of IGF-1R, a tyrosine kinase and a member of the insulin receptor family, stimulates cell proliferation, enables oncogenic transformation, and suppresses apoptosis; IGF-1R signaling has been highly implicated in tumorigenesis and metastasis.