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Rosmantuzumab

National Cancer Institute

Source

National Cancer Institute. *Rosmantuzumab*. NCI Thesaurus. Code C122921.

An immunoglobulin (Ig) G1 humanized monoclonal antibody targeting human R-spondin 3 (RSPO3), with potential immunostimulating and antineoplastic activities. Upon intravenous administration, rosmantuzumab targets and binds to RSPO3 expressed on tumor cells. This prevents the activation of RSPO3, and inhibits both the binding of RSPO3 to leucine-rich repeat-containing G-coupled receptors (LGRs) and the activation of the RSPO-LGR pathway. This may result in an inhibition of both cancer stem cell (CSC) survival and the proliferation of cancer cells in which this pathway is overactivated. The RSPO-LGR pathway is a CSC pathway activated in a variety of cancer cell types.