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## Nidanilimab

National Cancer Institute

## Source

National Cancer Institute. <u>Nidanilimab</u>. NCI Thesaurus. Code C153375.

A low fucose, fully humanized monoclonal immunoglobulin G1 (IgG1) antibody (hmAb) against the interleukin 1 receptor accessory protein (interleukin-1 receptor associated protein; IL1RAP), with potential immunomodulating, anti-inflammatory and antineoplastic activities. Upon intravenous administration, nidanilimab targets and binds to IL1RAP, thereby preventing IL1RAP-mediated signaling, and disrupting IL-1 and IL-33 mediated nuclear factor kappa beta (NFkB) activation. This prevents the secretion of tumor stimulating cytokines, decreases tumor inflammation and inhibits tumor cell proliferation. In addition, nidanilimab induces antibody-dependent cellular cytotoxicity (ADCC), and stimulates natural killer (NK) cells to attack tumor cells, thereby killing the IL1RAP-poisitive tumor cells. IL1RAP, a co-receptor of the IL-1 receptor (IL1R1) and the IL-33 receptor (ST2), is upregulated in certain tumor cells, and plays a key role in tumor cell proliferation.