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JAK2 Inhibitor BMS-911543

National Cancer Institute

Source

National Cancer Institute. *JAK2 Inhibitor BMS-911543*. NCI Thesaurus. Code C95702.

An orally available small molecule targeting a subset of Janus-associated kinase (JAK) with potential antineoplastic activity. JAK2 inhibitor BMS-911543 selectively inhibits JAK2, thereby preventing the JAK/STAT (signal transducer and activator of transcription) signaling cascade, including activation of STAT3. This may lead to an induction of tumor cell apoptosis and a decrease in cellular proliferation. JAK2, often upregulated or mutated in a variety of cancer cells, mediates STAT3 activation and plays a key role in tumor cell proliferation and survival.