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IL-2/9/15 Gamma Chain Receptor Inhibitor BNZ-1

National Cancer Institute

Source

National Cancer Institute. *IL-2/9/15 Gamma Chain Receptor Inhibitor BNZ-1*. NCI Thesaurus. Code C146636.

A pegylated peptide antagonist that binds to the common gamma chain (gc; IL2RG; CD132) of the signaling receptor for the pro-inflammatory cytokines interleukin (IL)-2, IL-9, and IL-15, with potential immunomodulating and antineoplastic activities. Upon administration, IL-2/9/15 gc receptor inhibitor BNZ-1 specifically targets and binds to the IL binding site on the gc receptor and blocks IL-2, IL-9 and IL-15 binding, thereby inhibiting IL-2-, IL-9-, and IL-15-mediated signaling and downstream pathways. This may inhibit proliferation of tumor cells that are dependent on IL-2/9/15 signaling for their growth. IL-2/9/15 are upregulated in certain tumor cell types and play a key role in tumor progression and survival.