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(54) Title: INHIBITORS OF HUMAN PHOSPHATIDYL-INOSITOL 3-KINASE DELTA

(57) Abstract: Methods of inhibiting phosphatidylinositol 3-kinase delta isoform (PI3Kδ) activity, and methods of treating diseases, such as disorders of immunity and inflammation, in which PI3Kδ plays a role in leukocyte function are disclosed. Preferably, the methods employ active agents that selectively inhibit PI3Kδ, while not significantly inhibiting activity of other PI3K isoforms. Compounds are provided that inhibit PI3Kδ activity, including compounds that selectively inhibit PI3Kδ activity. Methods of using PI3Kδ inhibitory compound s to inhibit cancer cell growth or proliferation are also provided. Accordingly, the invention provides methods of using PI3Kδ inhibitory compounds to inhibit PI3Kδ-mediated processes *in vitro* and *in vivo*.