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(54) Title: HETEROAROMATIC COMPOUNDS AS PI3 KINASE MODULATORS AND METHODS OF USE

(57) Abstract: The present invention provides heteroaromatic derivatives and pharmaceutical acceptable salts and formulations thereof useful in modulating the protein kinase activity, especially phosphatidylinositol 3-kinases (PI3 kinases) and mTOR, and in modulating inter- and/or intra-cellular signaling activities such as proliferation, differentiation, apoptosis, migration and invasion. The invention also provides pharmaceutically acceptable compositions comprising such compounds and methods of using the compositions in the treatment of hyperproliferative disorders in mammals, especially humans.