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(54) Title: METHODS FOR TREATING THERAPY-RESISTANT TUMORS

(57) Abstract: This invention provides a method for selectively inhibiting a pathological cell, wherein the cell is characterized by expression of an endogenous, intracellular activating enzyme and wherein the enzyme is not inactivated by a substrate prodrug compound. The method requires contacting the cell with an effective amount of the substrate compound thereby selectively inhibiting the proliferation of the pathological cell. This invention also provides a method for screening for prodrugs selectively converted to a toxin in a cell by an enzyme by contacting at least two test cells that express an endogenous, intracellular enzyme with the candidate prodrug from the same or different species and assaying for activation of the prodrug into toxic agents by the endogenous, intracellular enzyme.