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Discovery of 4-[(5-arylidene-4-oxothiazolidin-3-yl)methyl]benzoic acid derivatives active as novel potent allosteric inhibitors of protein tyrosine phosphatase 1B: In silico studies and in vitro evaluation as insulinomimetic and anti-inflammatory agents

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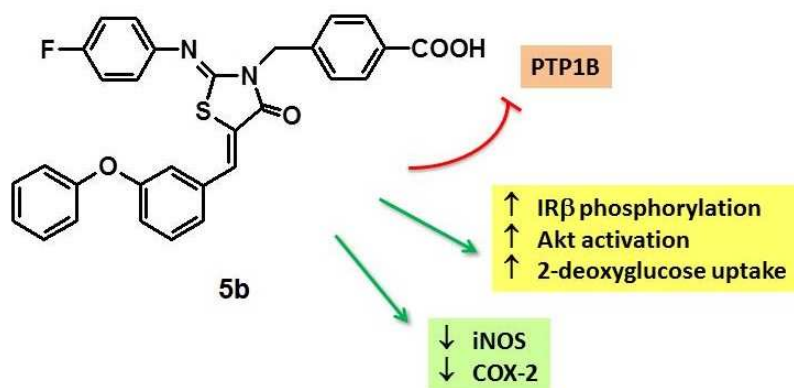
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Graphical abstract

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In silico studies and biological evaluation of new 4-thiazolidinone derivatives, which were designed and synthesised as inhibitors of protein tyrosine phosphatase 1B, led to the identification of novel potent allosteric inhibitors of the target enzyme as well as to a new lead compound (**5b**) endowed with promising insulinomimetic and anti-inflammatory properties in cell-based models.

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