Glucose-6-phosphate Dehydrogenase inhibitor G6PD Small Molecule (Tool Compound)

Catalogue number: 160405 Sub-type: Inhibitor Images:

Contributor

Inventor: Ian Waddell Institute: Cancer Research UK Manchester Institute Images:

Tool details

***FOR RESEARCH USE ONLY**

ools.org Name: Glucose-6-phosphate Dehydrogenase inhibitor G6PD Small Molecule (Tool Compound)

Alternate name: G6PD; G6PD1; Glucose-6-phosphate 1-dehydrogenase; glucose-6-phosphate dehydrogenase; glucose-6-phosphate dehydrogenase, glucose 6 phosphate dehydrogenase

Class:

Conjugate:

Description: A selective inhibitor of Glucose-6-phosphate dehydrogenase (G6PD) which demonstrates anti-cancer activity. G6PD is a critical metabolic enzyme involved in the oxidative phase of the pentose phosphate pathway. Chinese hamster ovary cells that are devoid of G6PD display increased sensitivity to radiation and human fibroblasts deficient in G6PD display increased ROS and radiation sensitivity. Clinically, evidence from studies in larynx and gastric cancer suggests that tumours show increased G6P...

Purpose: Inhibitor Parental cell: **Organism:** Tissue: Model: Gender: **Isotype: Reactivity:** Selectivity: Inhibitory activity against related targets as % inhibition at given concentration: 6PGDH: 4.7% at 200 Â?M IDH: 0.9% at 200 Â?M RET: 4.8% at 100 Â?M LSD1: 6.3% at 40 Â?M Host: Immunogen: Immunogen UNIPROT ID:

Sequence: Growth properties: Production details: Formulation: Recommended controls: Bacterial resistance: Selectable markers: Additional notes: Relevant Indications: Larynx cancer, Gastric cancer

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Target details

Target:

Target alternate names:

Target background:

Molecular weight:

lc50: 1.0 uM

Applications

Application: Application notes:

Handling

Format: Concentration: Passage number: Growth medium: Temperature: Atmosphere: Volume: Storage medium: Storage buffer: Storage conditions: Shipping conditions: Dry Ice

Related tools

Related tools:

References

References: Klietsch et al. 1993. Circ Res. 72(2):349-60. PMID: 8418988. ; Ervasti et al. 1990. Nature. 345(6273):315-9. PMID: 2188135. ; Jorgensen et al. 1990. J Cell Biol. 110(4):1173-85. PMID: 2157716.

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