

Product Data Sheet

Product Name: Dehydroglyasperin C

Cat. No.: GC66362

Chemical Properties

Cas. No. 199331-35-6

Formula $C_{21}H_{22}O_5$ M.Wt 354.4

Solubility DMSO : 100 mg/mL (282.17 mM; Storage Store at -20°C
Need ultrasonic)

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

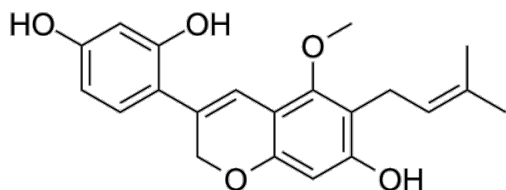
Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Structure



Background

Dehydroglyasperin C, a isoflavone, is a potent **NAD(P)H:oxidoquinone reductase (NQO1)** and **phase 2 enzyme** inducer. Dehydroglyasperin C has antioxidant, neuroprotective, cancer chemopreventive, and anti-inflammatory activities^{[1][2][3]}.

Dehydroglyasperin C (0.1-1 μ M; 24 h) blocks the PDGF-induced progression through the G0/G1 to S phase of the cell cycle, and down-regulates the expression of CDK; 2, cyclin E, CDK4 and cyclin D1. Dehydroglyasperin C significantly attenuates PDGF-stimulated phosphorylation of PDGF receptor- β , phospholipase C- γ 1, AKT and extracellular-regulated kinase 1/2, and DGC inhibits cell migration and the dissociation of actin filaments by PDGF^[1].

Dehydroglyasperin C (0.1-1 μ M; 24 h) treatment significantly decreases PDGF-induced cell number and DNA synthesis in a dose-dependent manner without any cytotoxicity in human aortic smooth muscle cells (HASMC)^[1].

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Cell Cycle Analysis^[1]

Cell Line: Human aortic smooth muscle cells (HASMC)

Concentration: 0.1 μ M, 0.5 μ M, 1 μ M

Incubation Time: 24 hours

Result: Blocked the PDGF-induced progression through the G0/G1 to S phase of the cell cycle.

Western Blot Analysis^[1]

Cell Line: Human aortic smooth muscle cells (HASMC)

Concentration: 0.1 μ M, 0.5 μ M, 1 μ M

Incubation Time: 24 hours

Result: Down-regulated the expression of CDK; 2, cyclin E, CDK4 and cyclin D1.

In ICR mice, Dehydroglyasperin C (5 mg/kg; once) combined with CCl₄ shows reduced lipid droplet formation in liver tissue, as assessed by histological examination. Further, DGC demonstrated a slight protective effect against centrilobular injury caused by CCl₄ injection, perhaps through suppression of CYP2E1 expression^[4].

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA