



LKT Laboratories, Inc.

Glabridin

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Product Information

Product ID G4400

CAS No. 59870-68-7

Chemical Name 4-[(3R)-3,4-Dihydro-8,8-dimethyl-2H,8H-benzo[1,2-b:3,4-b']dipyran-3-yl]-1,3-benzenediol

Synonym (R)-4-(3,4-Dihydro-8,8-dimethyl-2H,8H-benzo[1,2-b:3,4-b']dipyran-3-yl)-1,3-benzenediol

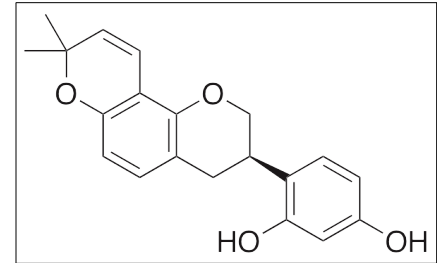
Formula C₂₀H₂₀O₄

Formula Wt. 324.37

Melting Point

Purity ≥98%

Solubility DMSO ≥14 mg/mL



Bulk quantities available upon request

Product ID	Size
G4400	5 mg
G4400	10 mg
G4400	25 mg

Store Temp Ambient

Ship Temp Ambient

Description Glabridin is a phytoestrogen and isoflavonoid originally found in the root of the licorice plant, *Glycyrrhiza*. Glabridin displays antioxidative, anti-obesity, anti-angiogenic, neuromodulatory, cognition enhancing, and sedative/hypnotic characteristics. In osteoblasts, glabridin downregulates PI3K and Akt and upregulates superoxide dismutase 1 and glutathione peroxidase 4; it also promotes fatty acid oxidation and inhibits adipogenesis. In animal models, this compound improves learning and memory, potentially through positive modulation of the GABA-A receptor. Additionally, glabridin inhibits Rho signaling by decreasing FAK and Src activation, inhibiting cancer cell migration and invasion as well as angiogenesis in vitro and in vivo.

References Jin Z, Kim S, Cho S, et al. Potentiating Effect of Glabridin on GABAA Receptor-Mediated Responses in Dorsal Raphe Neurons. *Planta Med.* 2013 Aug 23. [Epub ahead of print]. PMID: 23975867.

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Ahn J, Lee H, Jang J, et al. Anti-obesity effects of glabridin-rich supercritical carbon dioxide extract of licorice in high-fat-fed obese mice. *Food Chem Toxicol.* 2013 Jan;51:439-45. PMID: 22967722.

Lee JW, Choe SS, Jang H, et al. AMPK activation with glabridin ameliorates adiposity and lipid dysregulation in obesity. *J Lipid Res.* 2012 Jul;53(7):1277-86. PMID: 22493094.

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Tsai YM, Yang CJ, Hsu YL, et al. Glabridin inhibits migration, invasion, and angiogenesis of human non-small cell lung cancer A549 cells by inhibiting the FAK/rho signaling pathway. *Integr Cancer Ther.* 2011 Dec;10(4):341-9. PMID: 21059620.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.