

---

**Product Data Sheet**

---

Product Name: 18-hydroxy-11-deoxy Corticosterone

Cat. No.: GC18635

**Chemical Properties**

Cas. No. 379-68-0

Chemical Name 18,21-dihydroxy-pregn-4-ene-3,20-dione

SMILES O=C(CO)[C@H]1CC[C@@]2([H])[C@]3([H])CCC4=CC(CC[C@]4(C)[C@@]3([H])CC[C@@]21CO)=OFormula C<sub>21</sub>H<sub>30</sub>O<sub>4</sub>

M.Wt 346.5

Solubility DMF: 25 mg/ml,DMSO: 25 mg/ml,Ethanol: 25 mg/ml Storage Store at -20°C

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.

Structure **Background**

18-hydroxy-11-deoxy Corticosterone (18-OH-DOC) is a mineralocorticoid secreted by the zona fasciculata of the adrenal gland. Its biosynthesis is regulated by adrenocorticotrophic hormone as well as angiotensin II , which increases 18-OH-DOC production in isolated human adrenal glomerulosa cells. 18-OH-DOC can be formed via conversion of 11-deoxy corticosterone in human SK-MEL188 melanoma cells. 18-OH-DOC is an intermediate in the metabolism of progesterone and can be converted to aldosterone by the capsular portion of rat adrenal glands. Continuous infusion of 18-OH-DOC (200 µg/rat per day) increases systolic blood pressure in uninephrectomized saline-drinking rats. Plasma levels of 18-OH-DOC are elevated in a db/db mouse model of type 2 diabetes.

**References:**

[1].Braley, L.M., and Williams, G.H. The effect of angiotensin II and saralasin on 18-

**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

---

hydroxy-11-deoxycorticosterone production by isolated human adrenal glomerulosa cells  
J. Clin. Endocrinol. Metab. 49(4), 600-603 (1979).

[2].Carroll, J.C., Komanicky, P., and Melby, J.C. The relationship between plasma 18-hydroxy-11-deoxycorticosterone levels and production of hypertension in the rat J. Steroid Biochem. 14(10), 989-995 (1981).

[3].Müller, J. The conversion of 18-hydroxycorticosterone and 18-hydroxy-11-deoxycorticosterone to aldosterone by rat adrenal tissue: Evidence for an alternative biosynthetic pathway J. Steroid Biochem. 13(3), 245-251 (1980).

[4].Slominski, A., Gomez-Sanchez, C.E., Foecking, M.F., et al. Metabolism of progesterone to DOC, corticosterone and 18OHDOC in cultured human melanoma cells FEBS Lett. 455(3), 364-366 (1999).

[5]. Giesbertz, P., Padberg, I., Rein, D., et al. Metabolite profiling in plasma and tissues of ob/ob and db/db mice identifies novel markers of obesity and type 2 diabetes Diabetologia 58(9), 2133-2143 (2015).

**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**