

**Product Name** : 5-Hydroxyoxindole

**Synonyms** : —

**Cat No.** : M28142

**CAS Number** : 3416-18-0

**Molecular Formula** : C<sub>8</sub>H<sub>7</sub>NO<sub>2</sub>

**Formula Weight** : 149.1

**Chemical Name** : —

**Description** : 5-Hydroxyoxindole has been identified as a urinary metabolite of indole, which is produced from tryptophane via the tryptophanase activity of gut bacteria. 5-Hydroxyoxindole has lipid peroxidation inhibition activity and free radical DPPH scavenging. (In Vitro): 5-Hydroxyoxindole was less potent MAO-A inhibitor (IC<sub>50</sub> 56.8 µM) than isatin (31.8 µM) and especially 5-hydroxyisatin (6.5 µM), but it was the only highly selective MAO-A inhibitor among the all compounds studied (IC<sub>50</sub> MAO-A:IC<sub>50</sub> MAO-B = 0.044). (In Vivo): In blood plasma, 5-hydroxyoxindole levels were quite stable. The maximal 5-hydroxyoxindole concentration in plasma was: 5.4 nM (5-hydroxyoxindole molecular weight: 149).

**Pathway** : Immunology/Inflammation

**Target** : ROS

**Receptor** : serotonin; Norepinephrine; Dopamine

**Solubility** : —

**SMILES** : Oc1ccc2NC(=O)Cc2c1

**Storage** : (-20°C)

**Stability** : ≥ 2 years

**Reference** :

1. Shao L, et al. Discovery of N-methyl-1-(1-phenylcyclohexyl)methanamine, a novel triple serotonin, norepinephrine, and dopamine reuptake inhibitor. *Bioorg Med Chem Lett.* 2011 Mar 1;21(5):1438-41.