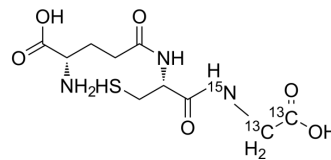


## L-Glutathione reduced-<sup>13</sup>C<sub>2</sub>, <sup>15</sup>N

<b>Cat. No.:</b>	HY-D0187S		
<b>CAS No.:</b>	815610-65-2		
<b>Molecular Formula:</b>	C <sub>8</sub> <sup>13</sup> C <sub>2</sub> H <sub>17</sub> N <sub>2</sub> <sup>15</sup> NO <sub>6</sub> S		
<b>Molecular Weight:</b>	310.3		
<b>Target:</b>	Ferroptosis; Endogenous Metabolite; Reactive Oxygen Species		
<b>Pathway:</b>	Apoptosis; Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 62.5 mg/mL (201.42 mM; Need ultrasonic)  
 H<sub>2</sub>O : 62.5 mg/mL (201.42 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
1 mM			3.2227 mL	16.1134 mL	32.2269 mL
5 mM			0.6445 mL	3.2227 mL	6.4454 mL
10 mM			0.3223 mL	1.6113 mL	3.2227 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

L-Glutathione reduced-<sup>13</sup>C<sub>2</sub>, <sup>15</sup>N is the <sup>13</sup>C- and <sup>15</sup>N-labeled L-Glutathione reduced. L-Glutathione reduced (GSH) is an endogenous antioxidant and is capable of scavenging oxygen-derived free radicals.

#### In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

---

[2]. Pereira-Rodrigues N, et al. Electrocatalytic activity of cobalt phthalocyanine CoPc adsorbed on a graphite electrode for the oxidation of reduced L-glutathione (GSH) and the reduction of its disulfide (GSSG) at physiological pH. *Bioelectrochemistry*. 2007 Jan;70(1):147-54.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA