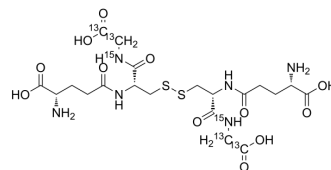


## Glutathione oxidized-<sup>13</sup>C<sub>4</sub>,<sup>15</sup>N<sub>2</sub>

<b>Cat. No.:</b>	HY-D0844S		
<b>CAS No.:</b>	1416898-83-3		
<b>Molecular Formula:</b>	C <sub>16</sub> <sup>13</sup> C <sub>4</sub> H <sub>32</sub> N <sub>4</sub> <sup>15</sup> N <sub>2</sub> O <sub>12</sub> S <sub>2</sub>		
<b>Molecular Weight:</b>	618.59		
<b>Target:</b>	Endogenous Metabolite; Reactive Oxygen Species		
<b>Pathway:</b>	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 : 250 mg/mL (404.14 mM; Need ultrasonic)  
 H<sub>2</sub>O : 250 mg/mL (404.14 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		1.6166 mL	8.0829 mL	16.1658 mL
	5 mM		0.3233 mL	1.6166 mL	3.2332 mL
	10 mM		0.1617 mL	0.8083 mL	1.6166 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Glutathione oxidized-<sup>13</sup>C<sub>4</sub>,<sup>15</sup>N<sub>2</sub> is the <sup>13</sup>C and <sup>15</sup>N labeled [Glutathione oxidized](#) (HY-D0844). Glutathione oxidized is produced by the oxidation of glutathione. Detoxification of reactive oxygen species is accompanied by production of glutathione oxidized. Glutathione oxidized can be used for the research of sickle cells and erythrocytes[1][2].

#### 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.

### CUSTOMER VALIDATION

- Cell Rep Med. 2023 May 24;101061.

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See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-223.

[2]. Nur E, et al. Increased efflux of oxidized glutathione (GSSG) causes glutathione depletion and potentially diminishes antioxidant defense in sickle erythrocytes. *Biochim Biophys Acta*. 2011 Nov;1812(11):1412-7.

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

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