

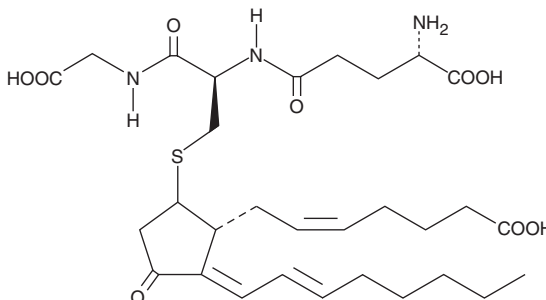
# PRODUCT INFORMATION



## 15-deoxy- $\Delta^{12,14}$ -Prostaglandin J<sub>2</sub> Glutathione

Item No. 18580

**CAS Registry No.:** 537695-15-1  
**Formal Name:** L- $\gamma$ -glutamyl-S-[(1S,2R,3E)-2-[(2Z)-6-carboxy-2-hexenyl]-3-(2Z)-2-octenylidene-4-oxocyclopentyl]-L-cysteinyl-glycine  
**Synonym:** 15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub> Glutathione  
**MF:** C<sub>30</sub>H<sub>45</sub>N<sub>3</sub>O<sub>9</sub>S  
**FW:** 623.8  
**Purity:**  $\geq 90\%$   
**UV/Vis.:**  $\lambda_{\text{max}}$ : 299 nm  
**Supplied as:** A solution in methanol  
**Storage:** -20°C  
**Stability:**  $\geq 2$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

15-deoxy- $\Delta^{12,14}$ -Prostaglandin J<sub>2</sub> glutathione (15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub> glutathione) is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub> glutathione in these solvents is approximately 20 mg/ml.

15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub> glutathione is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methanolic solution of 15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub> glutathione should be diluted with the aqueous buffer of choice. The solubility of 15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub> glutathione in PBS (pH 7.2) is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub> glutathione is a non-enzymatic adduct formed from 15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub> and glutathione.<sup>1-3</sup> The biological properties of this compound have not been characterized.

### References

1. Cox, B., Murphey, L.J., Zackert, W.E., *et al.* Human colorectal cancer cells efficiently conjugate the cyclopentenone prostaglandin, prostaglandin J<sub>2</sub>, to glutathione. *Biochim. Biophys. Acta* **1584**(1), 37-45 (2002).
2. Brunoldi, E.M., Zanoni, G., Vidari, G., *et al.* Cyclopentenone prostaglandin, 15-deoxy- $\Delta^{12,14}$ -PGJ<sub>2</sub>, is metabolized by HepG2 cells via conjugation with glutathione. *Chem. Res. Toxicol.* **20**(10), 1528-1535 (2007).
3. Paumi, C.M., Smitherman, P.K., Townsend, A.J., *et al.* Glutathione S-transferases (GSTs) inhibit transcriptional activation by the peroxisomal proliferator-activated receptor  $\gamma$  (PPAR $\gamma$ ) ligand, 15-deoxy- $\Delta^{12,14}$  prostaglandin J<sub>2</sub> (15-d-PGJ<sub>2</sub>). *Biochemistry* **43**(8), 2345-2352 (2004).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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