

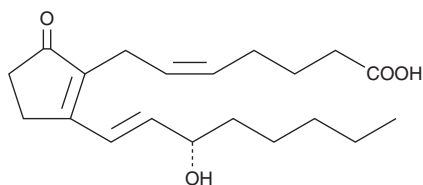
# PRODUCT INFORMATION



## Prostaglandin B<sub>2</sub> Quant-PAK Item No. 10006841

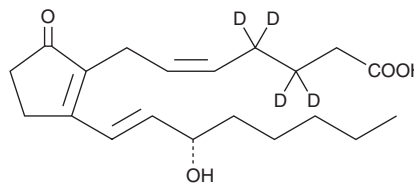
### Prostaglandin B<sub>2</sub>

**CAS Registry No.:** 13367-85-6  
**Formal Name:** 9-oxo-15S-hydroxy-prosta-5Z,8(12),13E-trien-1-oic acid  
**Synonym:** PGB<sub>2</sub>  
**MF:** C<sub>20</sub>H<sub>30</sub>O<sub>4</sub>  
**FW:** 334.5  
**Purity:** ≥99%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



### Prostaglandin B<sub>2</sub>-d<sub>4</sub>

**CAS Registry No.:** 211105-23-6  
**Formal Name:** 9-oxo-15S-hydroxy-prosta-5Z,8(12),13E-trien-1-oic-3,3,4,4-d<sub>4</sub> acid  
**Synonym:** PGB<sub>2</sub>-d<sub>4</sub>  
**MF:** C<sub>20</sub>H<sub>26</sub>D<sub>4</sub>O<sub>4</sub>  
**FW:** 338.5  
**Chemical Purity:** ≥98%  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>4</sub>); ≤1% d<sub>0</sub>  
**UV/Vis.:** λ<sub>max</sub>: 278 nm ε: 26,000  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥1 year



### Laboratory Procedures

This prostaglandin B<sub>2</sub> (PGB<sub>2</sub>) Quant-PAK contains 50 µg of PGB<sub>2</sub>-d<sub>4</sub> and 2-4 mg of PGB<sub>2</sub> (please see the vial for exact amount and concentration). For long term storage, we suggest that PGB<sub>2</sub> and PGB<sub>2</sub>-d<sub>4</sub> be stored as supplied at -20°C. They should be stable for at least one year.

PGB<sub>2</sub> is supplied as a crystalline solid. A stock solution may be made by dissolving the PGB<sub>2</sub> in an organic solvent purged with an inert gas. PGB<sub>2</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PGB<sub>2</sub> in these solvents is approximately 100, 50, and 75 mg/ml, respectively.

PGB<sub>2</sub>-d<sub>4</sub> is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of PGB<sub>2</sub>-d<sub>4</sub> in these solvents is approximately 100, 50, and 75 mg/ml, respectively.

PGB<sub>2</sub>-d<sub>4</sub> is intended for use as an internal standard for the quantification of PGB<sub>2</sub> (Item No. 11210) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

PGB<sub>2</sub> is a non-enzymatic dehydration product resulting from the treatment of PGE<sub>2</sub> or PGA<sub>2</sub> with strong base. It has weak agonist activity on TP receptors and can increase pulmonary blood pressure in the rabbit at relatively high doses (5 µg/kg).<sup>1</sup>

### Reference

1. Liu, F., Orr, J.A., and Wu, J.-Y. Prostaglandin B<sub>2</sub>-induced pulmonary hypertension is mediated by TXA<sub>2</sub>/PGH<sub>2</sub> receptor stimulation. *J. Am. Physiol. Soc.* **1040**, L602-L607 (1994).

#### 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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