# **PRODUCT** INFORMATION



**BW 245C** 

Item No. 12050

CAS Registry No.:	72814-32-5	
Formal Name:	(4R)-rel-3-[(3S)-3-cyclohexyl-	
	3-hydroxypropyl]-2,5-dioxo-4-	O II
	imidazolidineheptanoic acid	HCOOH
MF:	C <sub>19</sub> H <sub>32</sub> N <sub>2</sub> O <sub>5</sub>	
FW:	368.5	$\rightarrow \dot{N}$
Purity:	≥98%	o' ~ > <
Supplied as:	A crystalline solid	ОН
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

# Laboratory Procedures

BW 245C is supplied as a crystalline solid. A stock solution may be made by dissolving the BW 245C in the solvent of choice, which should be purged with an inert gas. BW 245C is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of BW 245C in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of BW 245C can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of BW 245C in PBS (pH 7.2) is approximately 2.37 mg/ml. We do not recommend storing the aqueous solution for more than one day.

# Description

BW 245C is a selective agonist for the  $DP_1$  receptor.<sup>1,2</sup> The K<sub>i</sub> of BW 245C for the inhibition of [<sup>3</sup>H]-PGD<sub>2</sub> binding to isolated human platelet membranes is 0.9 nM.<sup>1</sup> It has a reported IC<sub>50</sub> of 2.5 nM for the inhibition of ADP-induced human platelet aggregation and an IC<sub>50</sub> of 250 nM for the inhibition of rat platelet aggregation.<sup>2,3</sup>

# References

- 1. Boie, Y., Sawyer, N., Slipetz, D.M., et al. Molecular cloning and characterization of the human prostanoid DP receptor. J. Biol. Chem. 270(32), 18910-18916 (1995).
- 2. Town, M.H., Casals-Stenzel, J., and Schillinger, E. Pharmacological and cardiovascular properties of a hydantoin derivative, BW 245 C, with high affinity and selectivity for PGD<sub>2</sub> receptors. Prostaglandins 25(1), 13-28 (1983).
- 3. Narumiya, S. and Toda, N. Different responsiveness of prostaglandin  $D_2$ -sensitive systems to prostaglandin D<sub>2</sub> and its analogues. Br. J. Pharmacol. 85(2), 367-375 (1985).

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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