

BW 245C

## Chemical Properties

CAS No. : 72814-32-5

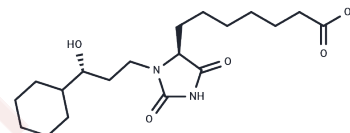
Formula: C<sub>19</sub>H<sub>32</sub>N<sub>2</sub>O<sub>5</sub>

Molecular Weight: 368.47

Store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	BW 245C is a selective prostaglandin-like DP receptor (DP1) agonist, a prostaglandin analogue with inhibitory effects on the aggregation response of collagen, which can be used to study diseases such as stroke.
Targets(IC50)	Prostaglandin Receptor
In vitro	The prostaglandin DP receptor agonist BW 245C (0.01-1µM) inhibited TGF-β-induced collagen secretion and increased intracellular cAMP in lung fibroblasts [3]. The use of the DP receptor agonist BW 245C (0.1-3µmol/L) dose-dependently increased the transendothelial resistance of human umbilical vein endothelial cells and decreased FITC-dextran permeability. Moreover, it elevated intracellular cAMP levels and subsequent protein kinase A (PKA) activity [4].
In vivo	Injection of the DP1 agonist BW 245C (100 nM, 20 µL) did not significantly increase MBP-positive eosinophils in the esophageal epithelial cells of OVA-sensitized guinea pigs [2]. WT and DP1 (-/-) mice underwent middle cerebral artery occlusion, followed by a single intraperitoneal injection of vehicle or 0.02, 0.2, or 2.0 mg/kg BW 245C, and then immediate reperfusion. The results showed that BW 245C treatment significantly increased baseline CBF in WT mice but not in DP1 (-/-) mice [1].

## Solubility Information

Solubility	DMSO: 30 mg/mL (81.42 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	2.7139 mL	13.5696 mL	27.1393 mL
5 mM	0.5428 mL	2.7139 mL	5.4279 mL
10 mM	0.2714 mL	1.357 mL	2.7139 mL
50 mM	0.0543 mL	0.2714 mL	0.5428 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Ahmad AS, et al. PGD2 DP1 receptor stimulation following stroke ameliorates cerebral blood flow and outcomes. *Neuroscience*. 2014 Oct 24;279:260-8.

Zhang S, et al. Prostaglandin D2 receptor D-type prostanoid receptor 2 mediates eosinophil trafficking into the esophagus. *Dis Esophagus*. 2014 Aug;27(6):601-6.

Ayabe S, et al. Prostaglandin D2 inhibits collagen secretion from lung fibroblasts by activating the DP receptor. *J Pharmacol Sci*. 2013;121(4):312-7. Epub 2013 Mar 29.

Kobayashi K, et al. Prostaglandin D2-DP signaling promotes endothelial barrier function via the cAMP/PKA/Tiam1/Rac1 pathway. *Arterioscler Thromb Vasc Biol*. 2013 Mar;33(3):565-71.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481