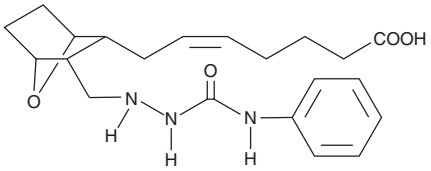
# PRODUCT INFORMATION

## SQ 29,548

*Item No. 19025*

**CAS Registry No.:** 98672-91-4
**Formal Name:** (5Z)-7-[(1S,2R,3R,4R)-3-[[2-[(phenylamino) carbonyl]hydrazinyl]methyl]-7-oxabicyclo[2.2.1]hept-2-yl]-5-heptenoic acid
**MF:** $C_{21}H_{29}N_3O_4$
**FW:** 387.5
**Purity:** ≥98%
**Supplied as:** A crystalline solid
**Storage:** -20°C
**Stability:** ≥4 years




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

### Laboratory Procedures

SQ 29,548 is supplied as a crystalline solid. A stock solution may be made by dissolving the SQ 29,548 in the solvent of choice, which should be purged with an inert gas. SQ 29,548 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of SQ 29,548 in these solvents is approximately 900 µg/ml, 5 mg/ml, and 200 µg/ml, respectively.

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 SQ 29,548 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of SQ 29,548 in PBS (pH 7.2) is approximately 250 µg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

SQ 29,548 is a highly selective TP receptor antagonist which binds to the human recombinant TP receptor with a $K_i$ of 4.1 nM.[1] It inhibits the aggregation of washed human platelets induced by U-46619 with an $IC_{50}$ of 0.06 µM.[2] It antagonizes U-46619 induced contraction of rat and guinea pig tracheal, arterial, and venous smooth muscles with drug/receptor dissociation constants ($K_B$) in the range of 0.5-1.7 nM.[3] SQ 29,548 also inhibits the contraction of rat vascular smooth muscle induced by 8-*iso* $PGF_{2\alpha}$.[4]

### References


1. Abramovitz, M., Adam, M., Boie, Y., *et al.* The utilization of recombinant prostanoid receptors to determine the affinities and selectivities of prostaglandins and related analogs. *Biochim. Biophys. Acta* **1483(2)**, 285-293 (2000).
2. Ogletree, M.L., Harris, D.N., Greenberg, R., *et al.* Pharmacological actions of SQ 29,548, a novel selective thromboxane antagonist. *J. Pharmacol. Exp. Ther.* **234(2)**, 435-441 (1985).
3. Ogletree, M.L. and Allen, G.T. Interspecies differences in thromboxane receptors: Studies with thromboxane receptor antagonists in rat and guinea pig smooth muscles. *J. Pharmacol. Exp. Ther.* **260(2)**, 789-794 (1992).
4. Fukunaga, M., Makita, N., Roberts, L.J., II, *et al.* Evidence for the existence of $F_2$-isoprostane receptors on rat vascular smooth muscle cells. *Am. J. Physiol.* **264(6 Pt 1)**, C1619-C1624 (1993).





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