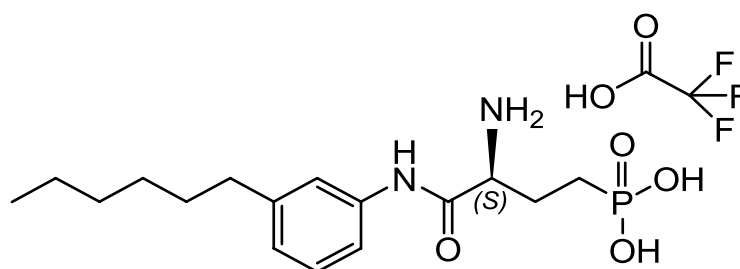


TECHNICAL DATA SHEET

(S)-3-Amino-(3-hexylphenylamino)-4-oxobutylphosphonic acid (TFA salt) (W140)

Catalog Number	857391	Physical state	Powder
Purity	> 99%	Transition temp.	No data
CAS		CMC	No data
Synonyms	W140; S1P ₁ Control Molecule	pK _a	No data
Molec. Formula	C ₁₈ H ₂₈ F ₃ N ₂ O ₆ P	TLC mobile phase	C:M:W*, 65:35:8, v/v
MW	456.394	Exact Mass	456.164
Percent composition	C 47.37% H 6.18% F 12.49% N 6.14% O 21.03% P 6.79%		
Stability	Store in <-20°C freezer for one year		
Solubility	See note below in Product Use section		
Web link	857391		

* chloroform:methanol:water



Description:

W140 is a S1P₁ control molecule. Sphingosine-1-phosphate (S1P) is a signaling lysophospholipid which regulates heart rate, vascular and stromal barrier integrity and lymphocyte egress (Sanna *et al*, 2006). S1P receptors have been implicated in such various functions as prevention of transplant rejection, treatment of multiple sclerosis and adult respiratory distress syndrome. The S1P₁ receptor is found in endothelial, cardiac and blood cells. Eliminating S1P₁ receptors result in embryonic lethal animals, underscoring their importance. S1P₁ receptors are essential for lymphocyte trafficking and phenotype (Sanna *et al*, 2006). W140 is the S enantiomer of W146, the S1P₁ receptor antagonist (Avanti's product number [857390](#)).

Product use:

To the lipid powder, add 0.1 x final volume of Na₂CO₃ and 0.1 x final volume of 20% (2-hydroxypropyl)-beta-cyclodextrin using deionized water to the final volume for concentrations up to 2.5 mg/mL (H. Rosen, personal communication).

References:

- Sanna MG *et al* (2006). Enhancement of capillary leakage and restoration of lymphocyte egress by a chiral S1P₁ antagonist in vivo. *Nat Chem Biol.* Aug 2(8): 434-41
- Gonzalez-Cabrera PJ *et al* (2008). Full pharmacological efficacy of a novel S1P₁ agonist that does not require S1P-like headgroup interactions. *Mol Pharmacol.* 2008 Nov;74(5):1308-18

Related products: [Receptor Agonist/Antagonist](#) [Sphingolipids](#)

MSDS: Available on Avanti's website for product number 857391