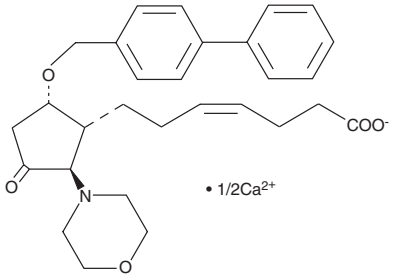
PRODUCT INFORMATION

AH 23848 (calcium salt)

Item No. 19023

CAS Registry No.:	81496-19-7
Formal Name:	(4Z)-*rel*-7-[(1R,2R,5S)-5-([1,1'-biphenyl]-4-ylmethoxy)-2-(4-morpholinyl)-3-oxocyclopentyl]-4-heptenoic acid, hemicalcium salt
MF:	$C_{29}H_{34}NO_5$ • 1/2Ca
FW:	496.6
Purity:	≥90%
UV/Vis.:	λ_{max}: 254 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

AH 23848 (calcium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the AH 23848 (calcium salt) in the solvent of choice, which should be purged with an inert gas. AH 23848 (calcium salt) is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml.

Description

Thromboxane (TXA_2) activates the T prostanoid (TP) receptor. Prostaglandin E_2 (PGE_2) activates four E prostanoid (EP) receptors, $EP_{1\text{-}4}$. AH 23848 is a dual antagonist of TP and EP_4 receptors.[1,2] It originally was found to inhibit TXA_2-induced platelet aggregation (IC_{50} = 0.26 µM) and the contraction of human bronchial smooth muscle induced by the TP agonist U-46619.[1,3] AH 23848 was subsequently demonstrated to impair PGE_2-mediated relaxation of piglet saphenous vein by antagonizing the PGE_2 receptor EP_4.[2] By inhibiting EP_4, it likewise suppresses serum-induced cAMP generation, cyclin A synthesis, and the proliferation of fibroblasts, as well as reduces metastasis in a mouse model of metastatic breast cancer.[4,5]

References

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2. Coleman, R.A., Grix, S.P., Head, S.A., *et al*. A novel inhibitory prostanoid receptor in piglet saphenous vein. *Prostaglandins* **47(2)**, 151-168 (1994).
3. Coleman, R.A. and Sheldrick, R.L.G. Prostanoid-induced contraction of human bronchial smooth muscle is mediated by TP-receptors. *Br. J. Pharmacol*. **96(3)**, 688-692 (1989).
4. Sanchez, T. and Moreno, J.J. Role of EP_1 and EP_4 PGE_2 subtype receptors in serum-induced 3T6 fibroblast cycle progression and proliferation. *Am. J. Physiol. Cell Physiol*. **282(2)**, C280-C288 (2002).
5. Ma, X., Kundu, N., Rifat, S., *et al*. Prostaglandin E receptor EP4 antagonism inhibits breast cancer metastasis. *Cancer Res*. **66(6)**, 2923-2927 (2006).

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