

Product data sheet



MedKoo Cat#: 413493 Name: Dazoxiben Free Base CAS#: 78218-09-4 (free base) Chemical Formula: C ₁₂ H ₁₂ N ₂ O ₃ Exact Mass: 232.0848 Molecular Weight: 232.24	
Product supplied as: Powder	
Purity (by HPLC): ≥ 98%	
Shipping conditions: Ambient temperature	
Storage conditions: Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Dazoxiben Free Base is an orally active thromboxane synthase inhibitor. It has shown a significant clinical improvement in patients with Raynaud's syndrome.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	4.31 mL	21.53 mL	43.06 mL
5 mM	0.86 mL	4.31 mL	8.61 mL
10 mM	0.43 mL	2.15 mL	4.31 mL
50 mM	0.09 mL	0.43 mL	0.86 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Goldman M, Hall C, Hawker RJ, McCollum CN. Dazoxiben examined for platelet inhibitory effect in an artificial circulation. Br J Clin Pharmacol. 1983;15 Suppl 1(Suppl 1):61S-65S. doi: 10.1111/j.1365-2125.1983.tb02109.x. PMID: 6681706; PMCID: PMC1427697.

In vivo study

1. Halushka PV, Cook JA, Wise WC. Beneficial effects of UK 37248, a thromboxane synthetase inhibitor, in experimental endotoxic shock in the rat. Br J Clin Pharmacol. 1983;15 Suppl 1(Suppl 1):133S-139S. doi: 10.1111/j.1365-2125.1983.tb02124.x. PMID: 6337604; PMCID: PMC1427698.

2. Hanson SR, Harker LA. Effect of dazoxiben on arterial graft thrombosis in the baboon. Br J Clin Pharmacol. 1983;15 Suppl 1(Suppl 1):57S-60S. doi: 10.1111/j.1365-2125.1983.tb02108.x. PMID: 6681705; PMCID: PMC1427679.

7. Bioactivity

Biological target:

Dazoxiben is an antithrombotic agent is a drug that reduces the formation of blood clots.

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In vitro activity

The effect of the thromboxane synthetase inhibitor dazoxiben (UK 37248) on ¹¹³Indium-labelled platelet deposition on Dacron arterial grafts was examined in an artificial circulation containing human blood which mimics the haemodynamics of femoropopliteal bypass. The influence of this drug on thromboxane production and platelet reactivity was measured during the experiment. In vitro dazoxiben reduced plasma thromboxane by about 80%. After graft perfusion the mean (\pm s.e.mean) plasma thromboxane level in the active circuits at 354.3 ± 46.3 pg/ml was significantly lower than that in the control circuits of 2013 ± 301 pg/ml ($P < 0.05$) with both post-perfusion circuits having elevated levels compared with the mean pre-circuit value of 79.1 ± 28.7 pg/ml (Figure 1).

Reference: Br J Clin Pharmacol. 1983;15 Suppl 1(Suppl 1):61S-65S. <https://pubmed.ncbi.nlm.nih.gov/6681706/>

In vivo activity

The effects of pretreatment with the thromboxane synthetase inhibitor UK 37248 (dazoxiben) administered 30 min before intravenous endotoxin (*S. enteritidis*) in the rat was investigated. UK 37248 pretreatment resulted in a significant (P less than 0.001) decrease in plasma iTXB2 at 30 min and 4 h to 193 ± 28 pg/ml ($n = 5$) and 421 ± 57 pg/ml ($n = 5$), respectively. Unexpectedly UK 37248 also significantly decreased plasma i6-keto PGF1 alpha at 30 min and 4 h to 360 ± 75 pg/ml ($n = 10$) (P less than 0.005) and 1920 ± 513 pg/ml ($n = 10$) (P less than 0.05), respectively. UK 37248 significantly (P less than 0.05) reduced the endotoxin mortality rate at 24 h from 69% ($n = 13$) to 30% ($n = 13$), UK 37248 also reduced splanchnic infarction from 90% ($n = 20$) to 6% ($n = 16$). UK 37248 significantly improved the endotoxin-induced thrombocytopenia, disseminated intravascular coagulation, hypoglycaemia and lysosomal labilization.

Reference: Br J Clin Pharmacol. 1983;15 Suppl 1(Suppl 1):133S-139S. <https://pubmed.ncbi.nlm.nih.gov/6337604/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.