

# PRODUCT INFORMATION



## Ketanserin (tartrate)

Item No. 22058

CAS Registry No.: 83846-83-7

Formal Name: 3-[2-[4-(4-fluorobenzoyl)-1-piperidinyl]ethyl]-2,4(1H,3H)-quinazolinedione (2R,3R)-2,3-dihydroxybutanedioate

MF:  $C_{22}H_{22}FN_3O_3 \cdot C_4H_6O_6$

FW: 545.5

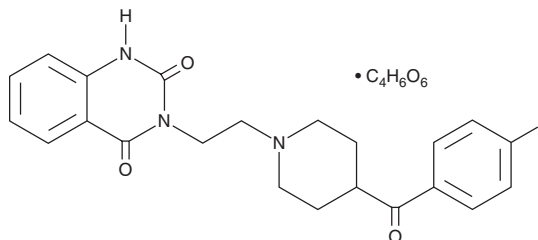
Purity:  $\geq 98\%$

UV/Vis.:  $\lambda_{max}$ : 219, 244 nm

Supplied as: A crystalline solid

Storage:  $-20^\circ\text{C}$

Stability:  $\geq 4$  years



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

### Laboratory Procedures

Ketanserin (tartrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the ketanserin (tartrate) in the solvent of choice, which should be purged with an inert gas. Ketanserin (tartrate) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ketanserin (tartrate) in these solvents is approximately 25 mg/ml.

Ketanserin (tartrate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ketanserin (tartrate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ketanserin (tartrate) has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Ketanserin is a potent antagonist of the serotonin (5-HT) receptor that is selective for 5-HT<sub>2</sub> ( $IC_{50} = 6.3$  nM;  $K_i = 2.1$  nM).<sup>1</sup> It has no activity at 5-HT<sub>1</sub> receptors but does have activity at histamine type 1,  $\alpha_1$ -adrenergic, and dopamine receptors with  $K_i$  values of 10, 10, and 220 nM, respectively. Ketanserin induces dose-dependent inhibition of contractile responses to 5-HT in isolated rat caudal artery, canine basilar, carotid, coronary and gastrosplenic arteries, and canine gastrosplenic and saphenous veins.<sup>2</sup> Ketanserin (10 mg/kg/day) significantly decreases blood pressure (BP), blood pressure variability (BPV), and hypertensive organ damage in spontaneously hypertensive rats.<sup>3</sup> Formulations containing ketanserin have been used to treat hypertension in early-onset preeclampsia.<sup>4</sup>

### References

1. Leysen, J.E., Awouters, F., Kennis, L., *et al.* *Life Sci.* **28(9)**, 1015-1022 (1981).
2. Van Neuten, J.M., Janssen, P.A.J., Van Beek, J., *et al.* *J. Pharmacol. Exp. Ther.* **218(1)**, 217-230 (1981).
3. Du, W.-M., Miao, C.-Y., Liu, J.-G., *et al.* *J. Cardiovasc. Pharmacol.* **41(2)**, 233-239 (2003).
4. Bijvank, S.W.N., Visser, Q., Duvekot, J.J., *et al.* *Eur. J. Obstet. Gynecol. Reprod. Biol.* **189**, 106-111 (2015).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/02/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897  
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM