# PRODUCT INFORMATION



## Dilazep (hydrochloride)

Item No. 29761

CAS Registry No.: 20153-98-4

Formal Name: 3,4,5-trimethoxy-benzoic

> acid, 1,1'-[(tetrahydro-1H-1,4-diazepine-1,4(5H)-diyl) di-3,1-propanediyl] ester,

dihydrochloride

MF: C<sub>31</sub>H<sub>44</sub>N<sub>2</sub>O<sub>10</sub> • 2HCl

FW: 677.6 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years • 2HC

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

#### **Laboratory Procedures**

Dilazep (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the dilazep (hydrochloride) in water. The solubility of dilazep (hydrochloride) in water is approximately 100 mM. We do not recommend storing the aqueous solution for more than one day.

#### Description

Dilazep is an inhibitor of equilibrative nucleoside transporter 1 (ENT1; IC<sub>50</sub> = 17.5 nM).<sup>1</sup> It is selective for ENT1 over ENT2 (IC<sub>50</sub> = 8,800 nM). Dilazep (0.03 and 0.3  $\mu$ M) increases adenosine-induced relaxation of, and decreases calcium-induced contractions in isolated guinea pig taenia caeci strips when used at concentrations of 1, 5, and 10 μM.<sup>2</sup> Dilazep (0.2 mg/kg, i.v.) reduces heart rate and systolic, mean, and diastolic aortic pressure and increases left ventricular blood flow in anesthetized dogs.3 It reduces aortic platelet adhesion and aggregation in a rabbit model of aortic injury-induced thrombosis when administered intravenously at a dose of 0.1 mg/kg.4

## References

- 1. Playa, H., Lewis, T.A., Ting, A., et al. Dilazep analogues for the study of equilibrative nucleoside transporters 1 and 2 (ENT1 and ENT2). Bioorg. Med. Chem. Lett. 24(24), 5801-5804 (2014).
- Tonini, M., Perucca, E., Manzo, L., et al. Dilazep: An inhibitor of adenosine uptake with intrinsic calcium antagonistic properties. J. Pharm. Pharmacol. 35(7), 434-439 (1983).
- Marzilli, M., Trivella, M.G., Levantesi, D., et al. Effect of dilazep on coronary and systemic circulations. Pharmacology 31(2), 82-87 (1985).
- 4. Sumiyoshi, A. and Hayashi, T. The inhibitory effect of dilazep on in vivo accumulation of platelets onto the damaged aorta in Rabbit. II. Morphological analysis. Comparative Study 29(1), 37-42 (1983).

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

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

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