Product data sheet



| MedKoo Cat#: 598179 | | | | |
|--|--|--|--|--|
| Name: Dilazep HCl | | | | |
| CAS: 20153-98-4 | | | | |
| Chemical Formula: C ₃₁ H ₄₆ Cl ₂ N ₂ O ₁₀ | | | | |
| Molecular Weight: 677.613 | | | | |
| Product supplied as: | Powder | | | |
| Purity (by HPLC): | $\geq 98\%$ | | | |
| 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:

Dilazep HCl is a coronary vasodilator with some antiarrhythmic activity.

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 |
|---------|-----------------|--------------|
| Water | 100.0 | 147.58 |

4. Stock solution preparation table:

| Concentration / Solvent Volume / Mass | 1 mg | 5 mg | 10 mg |
|---------------------------------------|---------|---------|----------|
| 1 mM | 1.48 mL | 7.38 mL | 14.76 mL |
| 5 mM | 0.30 mL | 1.48 mL | 2.95 mL |
| 10 mM | 0.15 mL | 0.74 mL | 1.48 mL |
| 50 mM | 0.03 mL | 0.15 mL | 0.30 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. Nakatsuka R, Nozaki T, Shinohara M, Ohura K. Dilazep decreases lipopolysaccharide-induced nitric oxide and TNF-alpha synthesis in RAW 264 cells. J Pharmacol Sci. 2010;113(3):271-5. doi: 10.1254/jphs.09286sc. PMID: 20647687.

In vivo study

1. Kawagoe J, Abe K, Ikuta J, Igarashi N, Shimizu S, Yamauchi Y, Kogure K. Effect of dilazep dihydrochloride against ischemia and reperfusion-induced disruption of blood-brain barrier in rats: a quantitative study. Naunyn Schmiedebergs Arch Pharmacol. 1992 Apr;345(4):485-8. doi: 10.1007/BF00176629. PMID: 1620248.

2. Zhang Y, Legare DJ, Geiger JD, Lautt WW. Dilazep potentiation of adenosine-mediated superior mesenteric arterial vasodilation. J Pharmacol Exp Ther. 1991 Sep;258(3):767-71. PMID: 1890619.

7. Bioactivity

Biological target:

Dilazep dihydrochloride is an inhibitor of adenosine uptake.

In vitro activity

Therefore, these observations may suggest that the suppression of NO synthesis after dilazep treatment in RAW 264 cells is caused by the inhibition of TNF-alpha expression via adenosine receptors.

Reference: J Pharmacol Sci. 2010;113(3):271-5. https://pubmed.ncbi.nlm.nih.gov/20647687/

Product data sheet



In vivo activity

Dilazep has been reported to inhibit edema formation in cerebral ischemia model of spontaneously hypertensive rats. These results suggest that dilazep prevents the ischemic damage of BBB, which may contribute to reduction of the brain edema.

Reference: Naunyn Schmiedebergs Arch Pharmacol. 1992 Apr;345(4):485-8. https://pubmed.ncbi.nlm.nih.gov/1620248/

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.