

[Home](#) [Pharmaceutical Chemistry Journal](#) [Article](#)

Stability Indicating RP-UPLC Method for the Quantitative Determination of Degradation Impurities of Benidipine Hydrochloride & Metoprolol Succinate in Combined Dosage Form

Published: 05 February 2024

Volume 57, pages 1674–1682, (2024) [Cite this article](#)

Pharmaceutical Chemistry Journal

[Aims and scope](#)

[Pranavkumar Shah](#), [Sanjay Hadiyal](#), [Jaydeep Lalpara](#), [Gaurang Dubal](#) & [Bhavin Dhaduk](#)

73 Accesses [Explore all metrics](#) →

A suitable RP-UPLC method for the quantitative analysis of degradation impurities of Benidipine hydrochloride & Metoprolol succinate is reported. The method was validated for specificity, linearity, range, accuracy, precision, sensitivity (LOQ and LOD), and robustness. The method shows excellent linearity with linear regression ($r > 0.9950$) within concentration range (0.5 to 3.0 $\mu\text{g/mL}$). LOD values were 0.14, 0.16 and, 0.15 and LOQ values were 0.42, 0.49 and 0.45 $\mu\text{g/mL}$ for MET impurity-B & O and BEN impurity-2, respectively. The proposed method could be applied to routine quality control analysis.