

Development and Validation of UV-FTIR Spectroscopics Methods for Analysis of Teneligliptin IP

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Abstract: *A simple, sensitive, and accurate UV-IR spectroscopic method was developed and validated for the analysis of teneligliptin in pharmaceutical formulations. The method involves the use of UV-Vis spectroscopy and FTIR spectroscopy to analyze teneligliptin standard solutions and pharmaceutical formulations. The method parameters were optimized to achieve maximum sensitivity and accuracy. The developed method was validated using parameters such as linearity, accuracy, precision, and specificity. The results showed that the method is linear over the concentration range of 10-100 µg/mL, with a correlation coefficient of 0.999. The accuracy and precision of the method were found to be within the acceptable limits. The developed UV-IR method was successfully applied to analyze teneligliptin in pharmaceutical formulations. The results were found to be in good agreement with the labelled claims.*

Keywords: Teneligliptin, UV-IR spectroscopy, analysis, pharmaceutical formulations, validation.

