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| **Development of first-order Derivative Spectrophotometry for Simultaneous Determination of Domperidone and Ilaprazole**  |
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| Abstract:  | A simple, accurate, precise and reproducible spectrophotometric method has been developed for the simultaneous estimation of Domperidone and Ilaprazole in bulk and its capsule dosage form. A first order derivative spectrophotometric method was developed for determination of two drugs, by using 0.1N NaOH as solvent system. This derivative method was developed by recording the signal at 252.6 nm (Zero crossing point of Domperidone) and at 307.1 nm (Zero crossing point of Ilaprazole). Developed method was validated according to ICH guidelines. The calibration graph follows Beer’s law in the range of 4.0 to 8.0 µg/ml for Ilaprazole and 12.0 to 24.0 µg/ml for Domperidone, 0.1 N NaOH as a solvent with R2 value greater than 0.999. Accuracy of the method was determined by recovery studies and showed % recovery between 98 to 102%. Intraday and inter day precision was checked for all methods and mean %RSD was found to be less than 2 for the method. The method was successfully applied for estimation of Ilaprazole and Domperidone in marketed formulation.  |
| Keyword:  | First order Derivative Spectrophotometric method, Domperidone, Ilaprazole, Lupila-D  |
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