

# Development and Validation of UV Spectrophotometric Method for Simultaneous Estimation of Vildagliptin and Dapagliflozin in Tablet Dosage Form

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**Abstract:** A UV spectrophotometric approach for quantifying Vildagliptin and Dapagliflozin in fixed-dose Combinations that is simple, fast, sensitive, accurate, and exact. The absorbance of Vildagliptin and Dapagliflozin was measured at two different wavelengths 260 nm and 227 nm, respectively. The Isosbestic point was discovered to be 250 nm in diameter. Vildagliptin ( $r^2=0.9994$ ) and Dapagliflozin ( $r^2=0.9991$ ) both showed linearity in the 64 $\mu\text{g/ml}$  to 96 $\mu\text{g/ml}$  and 50 $\mu\text{g/ml}$  to 75 $\mu\text{g/ml}$  range Respectively. A recovery study was carried out to confirm the methods' accuracy. In the recovery Study, the % RSD was less than 2. The methods were validated in accordance with ICH guidelines.

**Keywords:** Vildagliptin, Dapagliflozin, Simultaneous Estimation, UV.