Use of HPTLC as an orthogonal analytic method in active pharmaceutical ingredients site production

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Most of time, in pharmaceutical chemistry field, HPLC Reverse Phase is used to analyze the different components of a mixture.

With concrete examples taken in pharmaceutical industry, we show that the use of HPTLC makes it possible to supplement, consolidate and/or replace HPLC:

- 1- Follow-up of reactional kinetics by HPTLC after revelation with phophomolybdic reagent and scanner reading, in a fermentation solution containing substances without quantifiable chromophore under UV.
- 2- Quantitative analysis of polar nitrogenized substances by HPTLC using a gradient elution and scanner reading to consolidate a result obtained by HPLC: methodology of development of quantification gradient elution method by HPTLC.

In conclusion: in a sector as competitive as is pharmaceutical industry, HPTLC has its place among the other techniques because it allows, by its simplicity of implementation, its low cost and its complementarity, to make reliable the results obtained.