A detailed procedure for single-laboratory validation of qualitative methods was proposed and applied to the validation of a commercial kit for tests of sulphonamides residues in raw milk. Raw milk samples were spiked with sulfamethazine (SMZ), sulfadimetoxine (SDM), and sulfathiazole (STZ) at 12 concentration levels from 1.2 to 100.0 µg/L for SMZ and from 0.2 to 100.0 µg/L for SDM and STZ, being 30 independent replicates for each level, plus the blank. The blind samples were prepared and analyzed in three different analytical batches, with ten replicates per level, by three analysts. Improved performance of the method was observed when adopted the practice of visual reading. For this way, the unreliability region (RPC) for detection of SMZ, SDM, and STZ were estimated, respectively, between 9.2 and 1.5 µg/L, 1.6 and 0.1 µg/L, and 1.3 and 0.02 µg/L. The limits of detection were 9.2 for SMZ, 1.6 for SDM, and 1.3 µg/L for STZ. The method did not showed accordance and concordance for all levels outside the RPC. Selectivity of the kit was demonstrated for the studied sulfonamides in relation to trimethoprim. Robustness was obtained for the time and temperature of incubation of the test strips between 54 and 58 °C and between 60 and 10 minutes, respectively. 100 % of reliability and sensibility rates and 0 % of false-negative rate were obtained at the maximum limits established by Brazilian and European (100 µg/L) and USA (10 µg/L) laws. Thus, the validated kit was considered fitness for the purpose of monitoring sulfonamide residues in raw milk, respecting the maximum residue limits of the national and international legislation.