

PLAGIAT MERUPAKAN TINDAKAN TIDAK TERPUJI

PENETAPAN KADAR KURKUMIN DALAM SEDIAAN CAIR OBAT HERBAL TERSTANDAR MERK KIRANTI[®] SECARA KROMATOGRAFI CAIR KINERJA TINGGI FASE TERBALIK

INTISARI

Kiranti[®] merupakan salah satu jenis sediaan cair obat herbal terstandar (OHT) yang diproduksi oleh PT Ultra Prima Abadi (Orang Tua Group). Kunyit merupakan komponen utama yang terdapat dalam Kiranti[®]. Senyawa aktif yang menyusun sebagian besar kunyit adalah kurkumin. Kurkumin dapat ditetapkan kadarnya menggunakan metode Kromatografi Kinerja Tinggi (KCKT) fase terbalik.

Penelitian ini bersifat noneksperimental deskriptif karena tidak terdapat manipulasi dan perlakuan terhadap subjek uji. Kurkumin dianalisis secara kuantitatif dengan sistem KCKT fase terbalik dengan kolom oktadesilsilan (C18) dan detektor Ultraviolet-Visible (UV-VIS) pada panjang gelombang 432 nm serta menggunakan fase gerak campuran metanol dan asam asetat glasial 2% (90:10 v/v). Metode yang digunakan dalam penelitian ini telah dioptimasi dan divalidasi.

Penetapan kadar kurkumin yang ada di dalam sediaan cair OHT merk Kiranti[®] dilakukan untuk melihat kesesuaian kadar kurkumin terukur dengan kadar kurkumin yang tertulis pada label dan kesamaan kadar kurkumin dalam tiga *batch* sediaan Kiranti[®]. Kadar rata-rata kurkumin dalam tiga *batch* Kiranti[®] berturut-turut sebagai berikut *batch* 1 sebesar $14,0364 \pm 0,2033$ mg/ml; *batch* 2 sebesar $36,1886 \pm 0,6878$ mg/ml; dan *batch* 3 sebesar $17,0578 \pm 0,2546$ mg/ml. Kadar tersebut lebih tinggi daripada kadar teoritis kurkumin dalam sampel Kiranti[®]. Kadar kurkumin dalam ketiga *batch* Kiranti[®] tersebut tidak sama.

Kata Kunci: Kiranti[®], kurkumin, KCKT, kadar kurkumin.

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QUANTIFICATION OF CURCUMIN IN LIQUID DOSAGE FORM OF SCIENTIFIC BASED HERBAL MEDICINE KIRANTI® USING HIGH PERFORMANCE LIQUID CHROMATOGRPHY REVERSE PHASE

ABSTRACT

Kiranti® is the one of scientific based herbal medicine liquid dosage form which produced by PT Ultra Prima Abadi (Orang Tua Group). Turmeric is the main component in Kiranti®. The main active compound in turmeric is curcumin. Curcumin can be quantified by reverse phase of High Pressure Liquid Chromatography (HPLC) method.

This experiment was descriptive non-experimental because there were no manipulation and treatment to the test subject. Curcumin was determined quantitatively by reverse phase of High Pressure Liquid Chromatography (HPLC) method. The experiment was using octadecylsilane (C18) column and ultraviolet-visible (UV-Vis) Detector. The maximum wavelength was 432 nm. Methanol and Glacial acetic acid (2%) mixture (90:10 v/v) were used as mobile phase in HPLC. The method that used in this experiment, was optimized and validated.

The determination of curcumin in Kiranti was done for inspecting the compatibility of determined curcumin concentration with curcumin concentration which written in the label. Besides that, the similarity of curcumin concentration in three batches Kiranti was inspected too. The average of curcumin concentration in first batch was $14,0364 \pm 0,2033$ mg/ml; in second batch was $36,1886 \pm 0,6878$ mg/ml; and the third batch was $17,0578 \pm 0,2546$ mg/ml. The concentration was higher than curcumin concentration theoretically in Kiranti. The curcumin concentration in three batches Kiranti was not similar.

Keywords: Kiranti®, curcumin, HPLC, curcumin concentration.