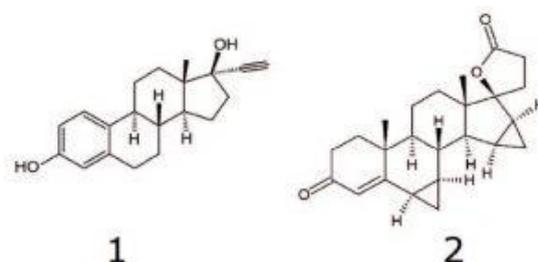
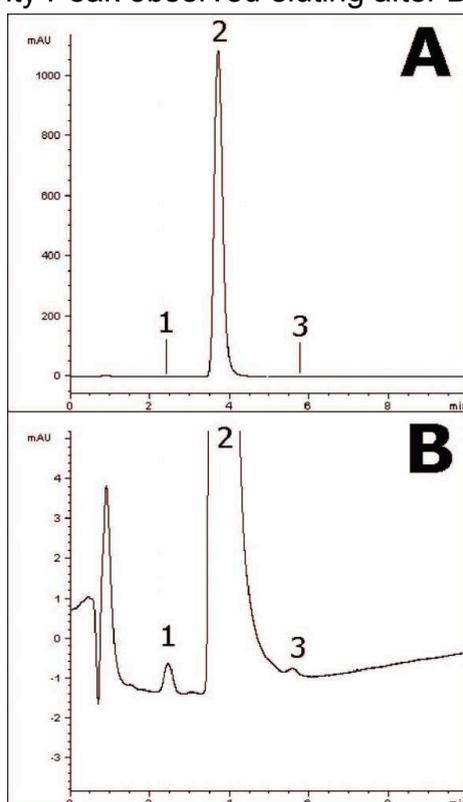


## Drospirenone and Ethinyl Estradiol Tablet Analyzed with HPLC - AppNote

### Separation of Drospirenone and Ethinyl Estradiol

Good Selectivity with high Efficiency Peaks can be achieved analyzing Ocella Tablets. This can be helpful since Ethinyl Estradiol is present at a much lower concentration than Drospirenone and therefore can be difficult to detect; the high Efficiency can contribute to a stronger Signal in detection thus increasing Sensitivity. Furthermore, the isocratic Mobile Phase is very simple to prepare or even obtain pre-mixed, allowing for streamlined routine Assays of this formulation in QC laboratories.

*Figure A* shows the full view of the Chromatogram, with the Drospirenone Peak shown in its entirety. *Figure B* shows a zoom-in view so that the tiny Ethinyl Estradiol Peak can be seen more clearly and measured. There is even an Impurity Peak observed eluting after Drospirenone.



### Peaks:

1. Ethinyl estradiol, 2. Drospirenone, 3. Impurity

### Method Conditions

**Column:** Cogent Bidentate C18 2.0™, 2.2 µm, 120Å

**Catalog No.:** [40218-05P-2](#)

**Dimensions:** 2.1 x 5 0mm

**Mobile Phase:** 50:50 DI Water / Acetonitrile (v/v)

**Injection vol.:** 4.0 µL

**Flow rate:** 0.2 mL / minute

**Detection:** UV @ 265 nm

**Sample Preparation:** Ocella® Tablet (3mg strength Drospirenone and 0.03mg strength Ethinyl Estradiol) was ground and added to a 10 mL volumetric flask containing a portion of Acetonitrile. It was sonicated for 10 minutes and diluted to mark. After mixing, a portion was filtered (0.45 µm, Nylon Syringe Filter) and used for HPLC injections.

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**Note:** The combination formulation of Drospirenone and Ethinyl Estradiol is used as a contraceptive and also to alleviate symptoms of premenstrual dysphoric disorder.

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**Attachment No 338 Ocella® Tablet Analyzed with HPLC pdf** 0.3 Mb [Download File](#)

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