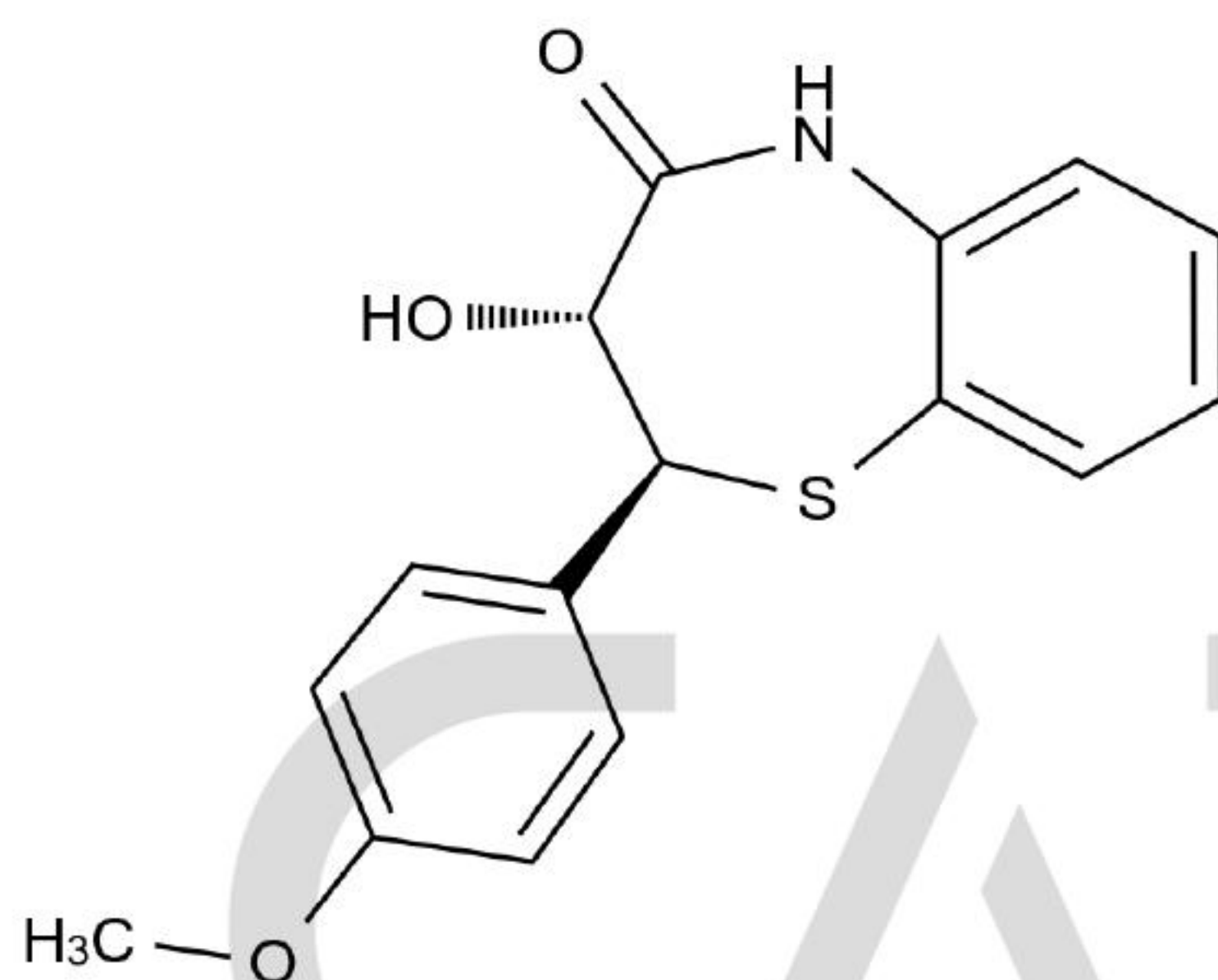


# Certificate of Analysis

## Reference Material & Standard

|                    |                                                   |                   |                                           |
|--------------------|---------------------------------------------------|-------------------|-------------------------------------------|
| Product Name:      | Diltiazem Impurity 20                             | Catalogue Number: | C4X-136820                                |
| Synonyms:          | N/A                                               | Lot Number:       | 0903-RF-0079                              |
| CAS Number:        | 132830-16-1                                       | Expiry Date:      | Sep 05, 2027                              |
| Molecular Formula: | C <sub>16</sub> H <sub>15</sub> NO <sub>3</sub> S | Storage:          | 2°C ~ 8°C Protected from light and Sealed |
| Molecular Weight:  | 301.36                                            |                   |                                           |

Chemical Structure:



| Test Items     | Method            | Results     |
|----------------|-------------------|-------------|
| Appearance     | Visual inspection | White Solid |
| Identification | LCMS&HNMR         | Confirmed   |
| Purity         | HPLC              | 99.674%     |
| Loss On Drying | TGA               | 3.7054%     |
| Assay          |                   | 96.0%       |

## Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Loss On Drying) \* Purity HPLC (%) / 100%

Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.

## Signature:

Prepared by:

*Nice*

Reviewed by:

*Koi*

Approved by General Manager:

*David*

Date: Sep 06, 2024

Date: Sep 06, 2024

Date: Sep 06, 2024

