Certificate of Analysis

| MedKoo Cat#: | Product Name: | Lot# |
|--------------|--------------------------|----------|
| 314263 | Acotiamide hydrochloride | TZC60412 |
| | trihydrate | |

| Chemical name | | |
|--|---|--|
| N-(2-(diisopropylamino)ethyl)-2-(2-hydroxy-4,5-dimethoxybenzamido)thiazole-4-carboxamide | | |
| hydrochloride trihydrate. | | |
| Syn | onyms | |
| YM-443; YM443; YM443; Z338; Z-338; Z 338; Acotiamide. Acotiamide hydrochloride | | |
| trihydrate; Brand name: Acofide. | | |
| Chemical structure | CAS# and Theoretical analysis | |
| | MedKoo Cat#: 314263 | |
| 0 | Name: Acotiamide hydrochloride trihydrate | |
| S | CAS#: 773092-05-0 | |
| HN N N | Lot#: TZC60412 | |
| OH NO H H-CI | Chemical Formula: C ₂₁ H ₃₇ ClN ₄ O ₈ S | |
| | Molecular Weight: 541.06 | |
| | Acotiamide free base | |
| | Chemical Formula: C ₂₁ H ₃₀ N ₄ O ₅ S | |
| | Exact Mass: 450.19369; Molecular Weight: 450.55 | |

| Analysis item | Specification/ Results | |
|--------------------|---|--|
| Appearance | White to off-white solid powder | |
| Structure | ¹ H-NMR analysis matches the structure. MS analysis gives the correct molecule weight. Both NMR and MS data are consistent | |
| Dunity (HDI C) | with those reported in the literature. >99.0% | |
| Purity (HPLC) | | |
| Solubility | Soluble in DMSO. | |
| Conclusion | This product conforms with MedKoo's quality standards | |
| Shipping condition | Shipped under ambient temperature as non-hazardous chemical. | |
| | This product is stable for a few weeks during ordinary shipping | |
| | and time spent in Customs. | |
| Storage condition | Short term storage (weeks): 0 – 4 °C under dry condition | |
| | Long term storage (months): -20 °C under dry condition | |
| Self life | At least 5 years if properly stored. | |

CAUTION: NOT FULLY TESTED. FOR RESEARCH ONLY, NOT FOR HUMAN USE